

BUL
1716

HARVARD UNIVERSITY



LIBRARY

OF THE

Museum of Comparative Zoology

31-0

7022
9-4

LIBRARY
JUL 7 1965
HARVARD
UNIVERSITY

BULLETINS
OF
AMERICAN
PALEONTOLOGY

————— ★ —————

VOL. XLVIII

————— ★ —————

NUMBER 218

1965

Paleontological Research Institution
Ithaca, New York
U. S. A.

PALEONTOLOGICAL RESEARCH INSTITUTION

1964 - 1965

PRESIDENT	AXEL A. OLSSON
VICE-PRESIDENT	DONALD W. FISHER
SECRETARY-TREASURER	REBECCA S. HARRIS
DIRECTOR	KATHERINE V. W. PALMER
COUNSEL	ARMAND L. ADAMS
REPRESENTATIVE AAAS COUNCIL	KENNETH E. CASTER

Trustees

KENNETH E. CASTER (1960-1966)	KATHERINE V. W. PALMER (Life)
DONALD W. FISHER (1961-1967)	WILLIAM B. HEROY (1963-1968)
REBECCA S. HARRIS (Life)	AXEL A. OLSSON (Life)
SOLOMON C. HOLLISTER (1959-1965)	HANS G. KUGLER (1963-1969)
W. STORRS COLE (1964-1970)	

BULLETINS OF AMERICAN PALEONTOLOGY and PALAEOGEOGRAPHICA AMERICANA

KATHERINE V. W. PALMER, *Editor*
MRS. FAY BRIGGS, *Secretary*

Advisory Board

KENNETH E. CASTER	HANS KUGLER
A. MYRA KEEN	JAY GLENN MARKS
AXEL A. OLSSON	

Complete titles and price list of separate available numbers may be had on application.

For reprint, Vols. 1-6, 8-15, Bulletins of American Paleontology see
Kraus Reprint Corp., 16 East 46th St., New York 17, N.Y., U.S.A.

For reprint, vol. I, Palaeontographica Americana see Johnson Reprint Corporation, 111 Fifth Ave., New York 3, N.Y., U.S.A.

Subscription may be entered at any time by volume or year, with average price of \$16.00 per volume for Bulletins. Numbers of Palaeontographica Americana invoiced per issue. Purchases in U.S.A. for professional purposes are deductible from income tax.

For sale by

Paleontological Research Institution
109 Dearborn Place
Ithaca, New York
U.S.A.

**BULLETINS
OF
AMERICAN PALEONTOLOGY**

(Founded 1895)

Vol. 48

No. 218

**CATALOGUE OF THE PALEOCENE AND EOCENE
MOLLUSCA OF THE SOUTHERN AND
EASTERN UNITED STATES**

**PART I. PELECYPODA, AMPHINEURA, PTEROPODA,
SCAPHOPODA, AND CEPHALOPODA**

By

KATHERINE V. W. PALMER

AND

DORIS C. BRANN

Paleontological Research Institution

June 25, 1965

**Paleontological Research Institution
Ithaca, New York, U.S.A.**

Bj-B

Library of Congress Card Number: GS 65-2

MUS. COMP. ZOOL
LIBRARY

JUL 7 1965

HARVARD
UNIVERSITY

Printed in the United States of America

ACKNOWLEDGMENTS

Financial aid for this project was provided by the American Philosophical Society (grant 2538, 1959, and grant 2892, 1961), Humble Oil and Refining Company, Houston, Texas (1961), and the Society of the Sigma Xi (grant, 1963), for which the authors are truly grateful. Without their help we could not have compiled the mass of data nor spent the time necessary in checking and verifying the innumerable details which make such a compendium valuable.

The authors are indebted to many persons from whom we have sought information or verifications of material submitted to them. All have given cooperatively of their time. We wish especially to thank James E. Allen of Alexandria, Louisiana, Judge Leon M. Bazile, Ashland, Virginia, M. Beauvais, Laboratoire de Géologie de la Sorbonne, Paris, France, Roger L. Batten, William K. Emerson, and Norman D. Newell, American Museum of Natural History, Edgar Bowles, Washington, D.C., Kenneth E. Caster, University of Cincinnati, Robert Chambers, Wagner Free Institute of Science, Philadelphia, Pennsylvania, André Chavan, Chantemerle, Seyssel, France, R. J. Cleevly, Deputy Librarian, British Museum (Natural History), L. R. Cox and C. P. Nuttall, Department of Paleontology, British Museum (Natural History), Fred L. Dimock, University of Michigan Library, William H. Hay, University of Illinois, W. G. Heaslip, Syracuse University, Gertrude D. Hess, American Philosophical Society, Philadelphia, Vilma Hudak and the late Mrs. Patricia O'Brien, New Jersey State Museum, Walter B. Jones, Philip E. La Moreaux, and Charles W. Copeland, Geological Survey of Alabama, F. Stearns Mac Neil and Ellen J. Moore, U.S. Geological Survey, Menlo Park, California, John Marwick, formerly New Zealand Geological Survey, Winnie McGlamery, formerly Geological Survey of Alabama, Patrick C. Mudd, clerk of Court, La Plata, Maryland, Lewis G. Nichols, Louisiana State University, David Nicol, University of Southern Illinois, Matthew H. Nitecki, Walker Museum, University of Chicago, Richard K. Olsson, Rutgers University, Edward D. Pearce, 2d, Museum of Science, Boston, Mrs. Venia Phillips and Horace G. Richards, Academy of Natural Sciences of Philadelphia, Emma

B. Richardson, Charleston Museum, South Carolina, Peter U. Rodda, Bureau of Economic Geology, University of Texas, Jean Roger, Bureau de Recherches, Géologiques et Minières, Paris, France, Henryk B. Stenzel, Shell Development Company, Houston, Texas, H. B. Whittington, Museum of Comparative Zoology, Cambridge, Massachusetts, Barbara Bedette and Druid Wilson, U.S. Geological Survey, Steve Windham, Florida Geological Survey, and J. M. Edmonds, University Museum, Oxford, England.

The libraries of the American Museum of Natural History, New York City, Cornell University, the Paleontological Research Institution, Ithaca, New York, and the United States Geological Survey in Washington, D.C., have been generous in the loan of pertinent books not available to us elsewhere. The British Museum (Natural History), London, England, has had photocopies made of pages of several books which we needed. We appreciate this help.

The late T. H. Aldrich had in the heyday of his fossil researches negotiated with Otto Meyer to draw various types of fossil mollusks in the Academy of Natural Sciences at Philadelphia. These consisted of the Eocene and Oligocene species of Conrad, Lea, Gabb, and Heilprin. Mr. Aldrich turned the book of the drawings of the gastropods over to the senior author when she was monographing the Claibornian gastropods. Plates of engravings of these drawings were included in the Bulletin (Palmer, 1937, plates 78-90). The Meyer drawings were realistically executed, and the publication of those drawings placed on record illustrations of types which had not been figured but later lost or had been poorly illustrated originally. At Mr. Aldrich's death the collection of the Meyer drawings of the pelecypods were deposited at the Geological Survey of Alabama. Through the courtesy of State Geologist P. E. La Moreaux and the Survey, the suite was loaned to us with permission to use those which we felt desirable. Most of the illustrations of types included are from the collection. We are indebted to the Alabama Geological Survey for this privilege.

Thanks are expressed to Mrs. Marjorie Jones for typing the manuscript and to Mrs. Fay Briggs for drafting the stratigraphic chart.

CONTENTS

Acknowledgments	3
Abstract	7
Introduction	7
Purpose	10
Procedure	10
Special collections	11
Miscellaneous stratigraphic notes	15
Location of type specimens by author and date	18
Depositories	21
Abbreviations	22
Part I. Pelecypoda	23
Amphineura	355
Gastropoda (Pteropoda)	356
Scaphopoda	360
Cephalopoda	372

CATALOGUE OF THE PALEOCENE AND EOCENE
MOLLUSCA OF THE SOUTHERN AND
EASTERN UNITED STATES
PART I. PELECYPODA, AMPHINEURA, PTEROPODA,
SCAPHOPODA, AND CEPHALOPODA

KATHERINE V. W. PALMER*

AND

DORIS C. BRANN†

ABSTRACT

The area of the Paleocene and Eocene molluscan species enumerated is that from Texas through the Mississippi embayment, Florida, to New Jersey. Part I includes the described species of pelecypods, chitons, pteropods, scaphopods, and cephalopods. Part II will contain those of the gastropods. The compilation regarding each species contains the present specific combination with the family, complete synonymy, type stratigraphic range, type locality with additional occurrences, kind of type specimen with the depository of the type if known. Specific names other than that of the heading are cross-referenced. Species which have been listed by authors under the typical name of which there is doubt as to their identification are segregated under the generic name with "sp." Effort has been made to include all pertinent corrections and stratigraphic information from published and available unpublished papers. About 1177 specific headings are presented in Part I. A table is compiled which contains all of the species listed in Pt. I with units: Paleocene, lower, middle (lower, middle, upper Claiborne combined and Gosport sand), and upper Eocene. A stratigraphic column for Paleocene and Eocene members, formations, and groups as used in the text is included. Cf. *Miodontiscus timothii* is a new name proposed for *Crassatellites clarkensis* Aldrich, 1911 not Dall, 1903a. *Nuculana hannahae* is a new name for *Leda milamensis* Harris, 1896 not *L. milamensis* Harris, 1895a.

INTRODUCTION

One hundred forty years ago John Finch (1824) described the first Eocene mollusk from the Atlantic Coastal Plain of the United States. His fossil oyster (*O. gigantissima*) from the rich bed of shells at Shell Bluff, on the Savannah River, Georgia, foretold and led the fertile array of discoveries of Paleocene and Eocene molluscan remains from the pits of New Jersey; the bluffs of the Chesapeake Bay; quarries of Georgia, of North Carolina, and Florida; exposures in South Carolina, particularly on the Santee River; the banks of the Tombigbee and Alabama Rivers of Alabama; the banks of Little Stave, Garland, and Town Creeks, Mississippi; the Arkansas and Saline Rivers, and Little Crow Creek of Arkansas; the Ouachita and Red Rivers of Louisiana; the Sabine, Brazos, Trinity, and Colorado Rivers of Texas to the Rio Grande. The preservation of the fossils of the animals which lived along the strand line of the province of the Atlantic Coast, of the Floridian transgression, and of the Mississippi embayment provide an extraordinary means of depicting the biologic, geographic, and geologic history of the species. The abundance of the shells makes

*Director, Paleontological Research Institution.

†Research Assistant, Paleontological Research Institution.

excellent guides to the stratigraphic horizons. Because the main western extent of the Paleocene and Eocene faunas remained within the confines of the greater Mississippi embayment during the rise and fall of the shore line of the stages, the changes in the biologic character of the faunas may be traced.

Alternating marine spread with uplift which allowed fresh-water conditions occurred during the greater units from the Midwayan through the Jacksonian times. Changing habitats are reflected in the occurrence and character of the fossils. Fortunately the fossils are abundantly preserved. Unique stocks with potential sturdy factors in certain genera furnish evidence of evolutionary development when interpreted by careful shell analysis and their stratigraphic age. Conspicuous are the lines of *Venericardia-Venicor*, *Ostrea*, *Athleta*, *Calyptrophorus*, *Lapparia*, *Pseudoliva*, *Caricella*, and *Bullia*. The extent of specimens in other groups, as yet not critically studied from such a standpoint, will provide excellent material for additional reviews. This catalogue is aimed to assemble the basic facts so that such researches may be suggested and accelerated. The senior author is engaged in monographing the molluscan fauna of the upper Eocene Ocala group of Florida and Georgia, the origin of which is Tethyan (Richards and Palmer, 1953; Palmer and Richards, 1954; Palmer, 1957) with the majority of the species new. This index has organized the information which is necessary before authentic specific and generic determinations can be made through research on such new forms or revision of the old faunas in the Atlantic and Gulf coastal regions.

Amongst the pioneer work on the paleontology of the lower Cenozoic the name of Timothy A. Conrad is preeminent. His descriptions of Eocene fossils began in 1830 on shells from Maryland and extended to 1875 with those new genera and species from North Carolina. His studies of fossils ranged from New Jersey to the Ouachita River in Louisiana and the Rio Grande, Texas. He (1832-35) and Isaac Lea (1833) first depicted the splendid fossils from the well-known layer (Gosport sand) of the middle Eocene at Claiborne Bluff on the Alabama River. In 1890 Marquis Antoine de Gregorio of Palermo, Sicily, produced an elaborate tome of 316 pages and 46 plates of the fossils from that famous landmark (see Wheeler, 1935). Harris, 1896 documented the Midway mollusks and in 1897(b) and 1899(a) those of the lower Eocene Wilcox (Sa-

bine) group. In 1919 Harris enumerated and illustrated the pelecypods of the middle Eocene, in 1937 the turrids (Gastropoda) and Palmer (1937) did the gastropods. Harris (1946) and Palmer (1947), monographed the Jackson, upper Eocene molluscan fauna. Harris' contributions include numerous other pertinent papers on the Eocene, both paleontologic and stratigraphic on the fossils from Maryland to Texas, always with the aim of providing tools toward a continued elucidation of the early Cenozoic of the South. The names are many who have added and are adding to the knowledge of these faunas. Outstanding are: Aldrich (1886-1931), Clark and Martin (1901), Gardner (1935, 1939a, and 1945), Gardner and Bowles (1939), Bowles (1939), Stenzel (1942, 1947, 1949), Stenzel and Turner (1940, 1942), Stenzel, Krause, and Twining (1957), Fisher, Rodda, and Dietrich (1964). Besides the larger contributions, smaller papers which added to the conception of the molluscan fauna, were important but minor in extent. These were mainly studies by Gabb, Heilprin, Meyer, Meyer and Aldrich, Vaughan, Casey, Miller, Miller and Thompson, Richards, and Cooke.

Paralleling and interrelating the biologic descriptions have been the field researches of the stratigraphic and geologic development of the interpretation of the Paleocene and Eocene history. Harris in his *Bulletins* (1896, 1897b) on the Midway and lower Eocene presented a brief historical resumé of the geologic work of the southern Tertiary in the various southern states. Stenzel, Krause, and Twining (1957) performed a service in endeavoring to reconcile and complete old data of the Texas area with modern interpretations. Murray (1961) has provided in his comprehensive compendium the historical summary and modern interpretations of the "Geology of the Atlantic and Gulf Coastal Province of North America." The general nature of the early Cenozoic is known and agreed upon, but the interpretation of relation and value of time and rock units are still debatable and are in minor disagreement. The general faunal stratigraphic significance is apparent, yet there is a vast amount of excellent material available for studies to be made at the generic and specific levels including revised generic determination and evaluation, ontogenetic studies, more concise generic determinations for stratigraphic and geographic guides, as well as dissertations on origin and migration of the fauna.

PURPOSE

The purpose of this project is to bring together concisely the basic information of the Paleocene and Eocene molluscan fossils and their associated sediments. We feel that before studies are continued on the species that an evaluation of each form should be made in terms of its original description with reference to type specimen, type locality, and type range. Those are fundamental to understanding the true facts of any fossil species. Without consideration of these controls misleading deductions may be made and the value of the fossil as a means of stratigraphic determination is reduced. It has been our aim to make available this information compactly yet as completely as possible. The evaluation of the record has been made from long experience with Paleocene and Eocene fossils in the field and laboratory and with the literature involved. It is hoped that the publication of these data will facilitate future researches.

PROCEDURE

Because of the extensive size of this book, in order to include as much pertinent information as possible, complete references are not written in the text. They are designated by author and year. The full reference will be found in the *Literature Cited*. For uniformity in the final form all Roman numbers as in the original reference are converted, except in certain cases, to Arabic.

Lists of identified species in stratigraphic papers, with certain exceptions, are not included in the synonymies. One cannot decide from a list how authentic the determination is. Therefore, without examining the specimens such species could not justifiably be placed in synonymy. Some identifications, judged from our experience, have been marked as incorrect. Equally others have been questioned, and some have been indicated as compared (cf.) to the species. This means that further examination as worth while is suggested. Some lists, such as Aldrich, 1886, Heilprin, 1884b, 1891a, Kennedy, 1895, Vaughan, 1896, Dumble, 1894, Trowbridge, 1923, Deussen, 1924, and Cooke, 1915, 1929, 1945, Perrilliat Montoya, 1963, have been evaluated in part. Numerous lists have not been considered for the reason stated.

In many cases, we doubt the extension of many species through several stratigraphic stages. In some instances lumping of the species was because the early paleontologic identification was not so discriminating as that by later workers who had the advantage of more extensive collections, additional stratigraphic knowledge, and greater library facilities. In those cases we have employed the method of indicating such forms other than the typical by using the abbreviation "sp." following the generic name. We feel that this will call the problem to the attention of future students so that the typical species can be used with greater stratigraphic value. Future work may unite the forms but should not be done without particular and critical judgment.

In the citation of family group name, the name commonly used, unless there is some evidence to the contrary, is included. We do not feel that it is necessary, valuable, or useful in a compendium of this nature to follow the International Code of Zoological Nomenclature (1961) to search for the oldest family group name. In most cases it would entail a large amount of busy work of which there would be no real value to our study. The use of many family group names of earliest origin over that of the type genus without extensive explanation would lead to confusion.

Because the purpose of this project is to bring together the molluscan species of the Paleocene and Eocene with their typical locality, range, and their historical description, special taxonomic inquiry has not been made of each generic category. Such work would require monographic study of each genus which time does not permit. Our plan is to present basic facts for such future generic studies. Many of the genera which we have marked "cf." to known genera probably are new forms, both or either from their nontypical character and range. It is not the place in this catalogue to describe new genera or species. We feel that the fundamental research involved in our studies is essential for a true paleontologic and stratigraphic delineation and important to improve the value of the fossil occurrence.

SPECIAL COLLECTIONS

Effort has been made in this work to locate type material so

that investigators will have ready information available for original research and verification. We are indebted to a host of persons, to whom we gratefully acknowledge their splendid cooperation in the search for these specimens and for the catalogue numbers of the respective institution or pertinent data involved in connection with a specimen. Particular collections are:

De Gregorio Alabama collection.—In 1890, Antoine de Gregorio of Palermo, Sicily, published a pretentious monograph of the molluscan fossils of the Gosport sand, the material of which he had received from the famous Claiborne Bluff, Monroe County, Alabama. Because De Gregorio had described and figured as new species and "varieties" from Claiborne Bluff, their identity constituted a problem to American investigators of the southern Eocene. After inquiry in 1937 (Palmer, 1937), the type and figured shells were reported to be in the DeGregorio home in Palermo. In 1945 (Palmer, 1945) the specimens had been deposited at the University of Palermo. When information concerning the suite was sought in 1957 the material was reported to be badly mixed and in irreplaceable condition. Through the splendid cooperation of Dr. G. Ruggieri of the Istituto di Geologia dell Università, Palermo, about 32 of the types were located and turned over to the Paleontological Research Institution. The specimens have been catalogued (Nos. 26426-26457) and that information is included in this catalogue.

PRI No.	Specific Name	Reference
26444	<i>Cerithium misgum</i>	p. 118, pl. 10, fig. 29, holotype
26442	<i>Turritella mela</i>	p. 127, pl. 11, fig. 40, holotype
26440	<i>Turritella carinifera tiga</i>	p. 126, pl. 11, fig. 22, holotype
26441	<i>Turritella litripa</i>	p. 125, pl. 11, fig. 20, holotype
26438	<i>Turritella apita</i>	p. 123, pl. 11, fig. 8, holotype
26443	<i>Solarium perinum</i>	p. 137, pl. 12, figs. 49-52, syntypes
26445	<i>Solarium supravenustum</i>	p. 137, pl. 12, figs. 54a-56, holotype
26433	<i>Triton grassator</i>	p. 96, pl. 7, fig. 41, syntype
26431	<i>Murex stetopus</i>	p. 96, pl. 7, fig. 34, holotype
26447	<i>Pleurofusua longirostropsis</i>	p. 34, pl. 2, figs. 26, 27 not type (3 spec. turrids)
26434	<i>Rostellaria quidest</i>	p. 115, pl. 10, figs. 1-2a, b, holotype
26426	<i>Voluta Sayana</i> var. <i>ipnotica</i>	pp. 64, 65, pl. 5, figs. 1, 2 holotype

26435	<i>Voluta pyruloids</i> var. <i>sita</i>	pp. 67, 68, pl. 5, figs. 15, 16, syntypes
26428	<i>Voluta cogitabunda</i>	p. 66, pl. 5, figs. 10b, c, syntype
26432	<i>Voluta Sayana</i> var. <i>mica</i>	pp. 64, 65, pl. 5, figs. 3, 4, holotype
26437	<i>Voluta teplica</i>	p. 65, pl. 5, fig. 7, holotype
26430	<i>Pseudoliva vetusta</i> var. <i>moerens</i>	p. 109, pl. 8, figs. 39, 40, holotype
26439	<i>Terebra andrega</i>	p. 17, pl. 1, figs. 43, 44, not type
26446	<i>Mitra fusoides lepa</i>	p. 72, pl. 5, figs. 34-36, syntypes
26429	<i>Mitra dubia</i> (H. C. Lea)	p. 75, pl. 5, figs. 56a, 57b, hypotype
26427	<i>Mitra subconquisita</i>	p. 76, pl. 5, figs. 50, 51, syntypes
26436	<i>Conus deperditus</i> var. <i>subdiadema</i>	p. 20, pl. 1, fig. 57, holotype
26454	<i>Pectunculus deltoideus</i> mut. <i>percuneatus</i>	p. 194, pl. 23, figs. 38-41, syntypes
26453	<i>Pectunculus deltoideus</i> mut. <i>ignus</i>	p. 194, pl. 23, fig. 36, syntype [also fig. 34 not <i>Pectunculus</i>]
26456	<i>Pectunculus deltoideus</i> mut. <i>ignus</i>	p. 194, pl. 23, fig. 34, not <i>Pectunculus</i> , syntype
26452	<i>Lucina impressa</i> var. <i>subcuneata</i>	p. 203, pl. 28, figs. 12, 13, holotype
26455	<i>Lucina impressa</i> var. <i>sublaevigata</i>	p. 203, pl. 28, fig. 10, holotype
26457	<i>Lucina papyracea</i> Lea	p. 205, hypotype
26451	<i>Cytherea aquorea</i> mut. <i>subvitrea</i>	p. 216, pl. 33, figs. 16-21, syntypes
26450	<i>Cytherea aequorea</i> mut. <i>cominduta</i>	pp. 216, 217, pl. 34, figs. 5, 6 syntypes
26448	<i>Corbula ignota</i>	p. 232, pl. 37, figs. 15-18, syntypes
26449	<i>Teredo simplexopsis</i>	p. 236, pl. 38, figs. 26a, b, holotype

James M. Safford collection.—In 1860, William Gabb (1860d) described molluscan species which had been collected by James M. Safford, State Geologist of Tennessee, from Hardeman County, Tennessee. G. D. Harris in 1896 (pp. 6, 52) examined the types which had been loaned to him. Harris described and refigured the shells of certain species and stated that a few were missing. He noted (1896, p. 68) that the Safford Collection was at Vanderbilt University, Nashville, Tennessee. Though repeated inquiries to Nashville have been made during the course of this work no information concerning the specimens has been obtained. Although Edgar Bowles, 1939 (pp. 309, 334) stated that the Safford Collection was at Vanderbilt, Dr. Bowles (per. com. Mar. 9, 1964) has no knowledge of the material. Other investigators whose work has come in association with the Safford material have been contacted. The whereabouts of the collection remains an enigma.

Chas. Lyell North Carolina Eocene collection.—After Sir Charles Lyell's first visit to America (1841) he published papers on a few American fossils. Of particular interest to the Eocene material were those from near Wilmington, North Carolina. Brief discussions with text figures were published by Lyell (1845). L. R. Cox of the British Museum (Natural History) has been in the act of tracing the specimens. Part of the material is in the Oxford University Museum and some is at the Lyell home, Kinnordy, Kirriemuir, in Forfarshire, Scotland. Mr. J. M. Edmonds has located types at Oxford.

Early Texas Eocene collection.—In 1892 and 1893, G. D. Harris was employed as Tertiary paleontologist to the Geological Survey of Texas. During that time he prepared a 415 page manuscript with descriptions and drawings illustrating new species. This manuscript was never published in complete form. In 1895 Harris extracted the descriptions and figures of certain species, and they were published in the Proceedings of the Academy of Natural Sciences of Philadelphia. He included discussion and localities of other species in 1919 in Bulletin of American Paleontology (No. 31). The localities were listed only by brief name and in some cases several localities accompanied the description of the species without an indication of the locality of the type. The Harris manuscript, preserved in the Paleontological Research Institution, includes the list of stations of the collections of the Texas material and also includes the station number of the locality of the type specimen. By checking the station number with the locality list, the type locality of the species is determined. This has been an important means of identifying the type age and providing stratigraphic value to the fossil. A brief notation of this information accompanies the citation of the species herein.

Stenzel, Krause, and Twining (1957) in carefully searching the labels and records of the early Texas Geological Survey have added pertinent and corrective interpretation to many of the obscure localities.

Through the help of Peter U. Rodda of the Bureau of Economic Geology of the University of Texas, the information of the present whereabouts of the types under discussion has been ob-

tained. These data include those at the Geology Department and the Bureau of Economic Geology of the University of Texas, and those which are now missing or not located.

R. P. Whitfield's descriptions of T. J. Hale collection.—R. P. Whitfield (1865) in the American Journal of Conchology (vol. 1, pp. 259-268, pl. 27) described various species, the material of which had been collected by Rev. T. J. Hale of Madison, Wisconsin, when in Alabama. The collection was supposed to have come from Alabama and Mississippi. Many of the localities enumerated by Whitfield proved erroneous because the localities had not been carefully differentiated as to place or age. Aldrich (1887, pp. 79-81), who was thoroughly familiar with the localities and fossils of the southern Eocene, corrected the data, mostly by species. Attention is called by us to Aldrich's notes and the rectification of the locality and age is made under the respective species. The collection apparently belonged to James Hall and eventually went to the University of Chicago. It is now at the Chicago Natural History Museum.

I. Lea Claiborne, Alabama, collection.—I. Lea described and figured new species of mollusks in "Contributions to Geology," published privately, 1833, from the Gosport sand at Claiborne, Alabama. The specimens were given to the Academy of Natural Sciences of Philadelphia. In 1895c G. D. Harris rearranged and catalogued the collection which had previously been organized by Angelo Heilprin. The original notebook in which Harris wrote out the names of the species with the catalogue number of the type specimens is in the Paleontological Research Institution. The catalogue numbers of those types as registered by Harris are inserted in this text with the corresponding species.

MISCELLANEOUS STRATIGRAPHIC NOTES

Kinkaid formation versus Kincaid formation.—The name Kinkaid formation, Weller, 1920 (Jour. Geol., vol. 28, No. 5, p. 405) for a Mississippian formation of Illinois and Kentucky might be confused with the name Kincaid formation Gardner, 1933 (A.A.P.G., Bull., vol. 17, No. 6, p. 144), Midway group, Paleocene

of Texas. The difference in spelling is particularly vulnerable if careful proof reading is not available in publication.

Logansport formation.—The formational name "Logansport" used in Barry and LeBlanc (1942 +) is preoccupied and should be renamed if important to use. The name was introduced in 1941 for an Eocene formation by Murray (A.A.P.G., Bull., vol. 25, No. 5, p. 941) in an abstract with no definition of a type locality. In 1941 Cooper and Warthin (Washington Acad. Sci., Jour., vol. 31, No. 6, p. 259) introduced the name Logansport limestone for a Middle Devonian formation in Indiana. It was not until 1945 when Murray and Thomas (A.A.P.G., Bull., vol. 29, No. 1, pp. 57-58) defined Logansport formation, Paleocene of Louisiana, that the name received validity. Hence the name Logansport limestone preoccupies that of the name in the Paleocene (Wilson, *et al.*, 1957, U.S.G.S., Bull. 1056A, p. 214; Fisher, 1961, p. 277).

Gosport sand—Moody's Branch formation.—It is unfortunate that in Bowles' (1939) *Turritella* monograph, the Gosport sand is converted to Moodys Branch which places the formation in the Jackson group, upper Eocene, instead of the uppermost middle Claiborne group or middle Eocene. The Gosport sand and its fauna is distinct from that of the Moodys Branch with certain species confined to each formation. Therefore, it is misleading to those who are unfamiliar with the paleontology and stratigraphy of each formation to have one placed equal to the other without a distinguishing explanation. To say that *Turritella apita* de Gregorio, *Turritella carinata* I. Lea, and *Mesalia vetusta* (Conrad), which are unique in the Gosport sand, are Moodys Branch, Jackson Eocene, is obscuring the true facts of their occurrence.

Age of "Showalter" Alabama material.—In 1860 (p. 291) Conrad described several species as given to him by Dr. Showalter of Uniontown, Alabama, "from a locality further north in Alabama than any Mr. Tuomey had explored." This statement was too ambiguous to be of value. Through the effort of Aldrich and Harris the age of several species has been determined (Harris, 1899a, p. 44).

A. C. Veatch surveys in Louisiana.—In 1900-1902 when A. C. Veatch was Assistant Geologist to G. D. Harris, Geologist-in-charge, of the Louisiana Geological Survey, several traverses were made by

him on rivers and areas in Louisiana, particularly on the Ouachita and Sabine Rivers. Excellent collections were made by him and tied in to the sections. The specimens were utilized in description and discussion of species especially by Harris (1919, 1937), Palmer (1937), and Harris and Palmer (1946, 1947). Sections were published in *Geology of Louisiana* (see Veatch, 1902), and the books are available. Those notes elucidate many obscure points and should be consulted by all students of the fauna and stratigraphy of the Eocene of the Gulf Coastal Plain.

Pendleton formation.—The name Pendleton formation (Wasem and Wilbert, 1943, *Jour. Paleont.*, vol. 17, pp. 181-195) is pre-occupied by the same name Pendleton sandstone (Kindle, 1901, *Indiana Dept. Geol. Nat. Res.*, 25th Ann. Rept., pp. 558-561), Devonian of Indiana. The name Pendleton Ferry formation was presented by Murray and Thomas (1945, *A.A.P.G.*, *Bull.*, vol. 29, No. 1, p. 56) as a substitute for Pendleton formation Wasem and Wilbert for the lower Eocene, Wilcox [Sabine] group of Texas and Louisiana. We are using the name Pendleton Ferry formation.

Gabb's material from Caldwell "Co." and Wheelock, Texas.—Gabb (1860d) described species from Texas at localities he called Caldwell "Co." and Wheelock. The location of the places has been a dilemma until Stenzel, Krause, and Twining, 1957, pp. 10, 11, made a plausible explanation deducing that Wheelock was the old settlement in Robertson County, Texas, (see Wheelock member, Cook Mountain formation) and that Caldwell "Co." was a mistake for Caldwell, Burleson County, Texas, Stone City beds.

Conrad, 1865, Eocene shells from Enterprise, Mississippi.—Conrad in 1865b (pp. 137-141) described a suite of fossils which he said was collected from "Enterprise, Clarke Co., Miss." by Dr. William Spillman. The set contained those which are typically Jackson upper Eocene and not characteristic of the sediments at Enterprise, Mississippi, which are Claibornian or middle Eocene. Aldrich long ago (1885c, p. 307) corrected the error. Dr. Spillman wrote Aldrich (Aug. 14, 1884) that he had not sent Conrad any specimens from Enterprise but had presented him with fossils from Garland's Creek, three miles east of Shubuta, Clarke County, Mississippi. This solved the problem.

Lisbon formation.—The name Lisbon formation Aldrich, 1886,

is preoccupied by the Ordovician or Cambrian formation Hitchcock, 1874. See glossary of stratigraphic terms in this catalogue.

Wilcox [*Sabine*] *group*.—See [*Sabine gr.*] formation in glossary of stratigraphic terms used in this catalogue.

LOCATION OF TYPE SPECIMENS BY AUTHOR AND DATE

(For depository and catalogue number, see under each species)

Aldrich, T. H.

1885a, 1885b, 1885c, 1886, 1887, 1890, 1894a, 1894b, 1895a, 1895b, 1897a, 1897b, 1898, 1901b, 1903, 1907, 1908a, 1908b, 1910a, 1910b, 1911 USNM (formerly JHU, transferred to USNM, 1962); 1895b JHU; 1894b, 1903a, 1921, 1931 GSATC; 1904 CNHM; 1911, 1919 (Harris) PRI

Barry, J. O.

1942+ LSU Pal. Mus.

Bowles, E. O.

1934 USNM; 1939, 1939 (with Gardner) USNM

Brown, A. P., and Pilsbry, H. A.

1912 ANSP

Call, R. E.

1891. Unknown

Casey, T. L.

1902a, 1902b, 1903, 1904 USNM

Chavan, A. *in* Palmer, K. V.W.

1937 Lab. Géol., Sorbonne, Paris

Clark, W. B.

1895 JHU; 1896, JHU, USNM, ANSP

Clark, W. B., and Martin, B. L.

1901 JHU (formerly Maryland Geol. Sur.); 1901 ANSP

Collins, R. E. L.

1934 USNM

Conrad, T. A.

1830, 1832b, 1833a, 1833b, 1833c, 1834, 1834a, 1835b, 1841, 1842b, 1843, 1844, 1845b, 1846b, 1846c, 1848a, 1848b, 1850, 1853, 1853a, 1854, 1856b, 1860, 1863a, 1864, 1865b, 1865e, 1867c, 1868, 1869b, 1872 ANSP (See Moore, 1962); 1857, 1865a, USNM; 1869b Rutgers (lost)

Cooke, C. W.

1926b USNM

Cope, E. D.

1866 ANSP

Cossmann, M.

1893 Lab. Géol., Sorbonne, Paris

Dall, W. H.

1890-1903a USNM; 1900 ANSP; 1903a PRI

- Finch, J.
1824 ANSP
- Gabb, Wm. M.
1860a, 1860b, 1860d, 1862a, 1862c, 1877 ANSP; 1862a USNM; 1860d formerly Vanderbilt Univ. No information available in 1962, 1963.
- Gardner, Julia A.
1923, 1927, 1935, 1945, 1951 USNM
- Gardner, Julia A., and Bowles, E.
1939 USNM
- Gregorio, Antoine de
1890. PRI or lost. See under type collections.
- Harbison, Anne
1944 ANSP
- Harris, G. D.
1894b, 1895a, 1896, 1897b, 1919 USNM; 1895a, 1895b, 1896, 1897b, 1898, 1899a, 1919, 1946, 1951 PRI; 1895a, 1896, 1919 BEG; 1896, 1897a, 1897b, 1946 ANSP; 1919 GSATC; 1951 Fla. Geol. Sur.
- Harris, G. D., and Palmer, K. V. W.
1946, 1947. See under each author
- Heilprin, Angelo
1881 GSATC, ANSP; 1891a BEG; 1865 CNHM
- Hughes, R. J., Jr.
1961 USNM
- Johnson, C. W.
1904 ANSP
- Kellum, L. B.
1926 USNM
- Kent, L. S.
1960 PRI
- Langdon, D. W., Jr.
1886 USNM
- Lea, H. C.
1841 ANSP
- Lea, I.
1833 ANSP. Catalogued by G. D. Harris in 1895c, unpublished list. Original notes ANSP and PRI
- Le Blanc, R. J.
1942+ LSU Pal. Mus.
- Lyell, Chas.
1845. Unknown. See under type collections
- MacNeil, F. S.
1934, 1951 USNM
- Martin, B. L.
1901 JHU. See Clark, W. B., and Martin, B. L.
- Meyer, Otto
1884, 1885a, 1886b, 1887a USNM; 1885a GSATC
- Meyer, O., and Aldrich, T. H.
1886 USNM

- Miller, A. K.
1947 USNM
- Miller, A. K., and Thompson, M. L.
1933 JHU, GSATC, Univ. Iowa; 1935 ANSP
- Morton, S.
1828b, 1830a, 1833a, 1833b, ANSP
- Owen, D. P.
1860 USNM
- Palmer, K. V.W.
1919, 1927/29, 1928, 1937, 1947 PRI; 1944 GSATC; 1944 ANSP
- Palmer, K. V.W. *in* Richards, H. G., and Palmer, K. V.W.
1953 Fla. Geol. Sur.
- Palmer, K. V.W. *in* Price, W. A., and Palmer, K. V.W.
1928 PRI
- Plummer, F. B.
1933 BEG
- Reeside, J. B., Jr.
1924 USNM
- Renick, B. C., and Stenzel, H. B.
1931 BEG
- Richards, H. G.
1946, 1947, 1948, 1950 ANSP; 1953 Fla. Geol. Sur.
- Rogers, W. B., and Rogers, H. D.
1837 unknown; 1839b MCZ (see list by Cushman, 1907)
- Sheldon, P. G.
1917 USNM
- Stenzel, H. B.
1935, 1939, 1940a, 1957 BEG
- Stenzel, H. B., and Krause, E. K.
1957 BEG
- Stenzel, H. B., Krause, E. K., and Twining, J. T.
1957 BEG
- Stenzel, H. B., and Turner, F. E.
1940 BEG
- Stenzel, H. B., and Twining, J. T.
1957 BEG
- Stewart, R. B.
1930 ANSP
- Tuomey, M.
1853 unknown; 1854 neotype, Univ. Iowa
- Tucker-Rowland, H. I.
1931, 1934, 1936b PRI; 1931, 1934, 1938 CNHM
- Trowbridge, A. C.
1932 USNM
- Van Winkle, K. [Palmer]
1919, 1921 PRI

Vaughan, T. W.
1896 USNM

Vokes, H. E.
1964 USNM

Weller, S.
1907 State Mus., Trenton, N.J.

Wheeler, H. E.
1910 USNM

White, C. A.
1882 USNM

Whitfield, R. P.
1869b, 1885, 1892, 1905, AMNH, 1885 State Mus., Trenton, N.J., 1865, 1892
CNHM

DEPOSITORIES

AMNH American Museum of Natural History, New York, N.Y.

ANSP Academy of Natural Sciences of Philadelphia, Pa.

BEG Bureau of Economic Geology, University of Texas, Austin, Texas

BM(NH) British Museum (Natural History), London, S.W. 7, England

BSNH Boston Society of Natural History, Boston, Mass. (Transferred to MCZ)

Charleston Mus. The Charleston Museum, Charleston, S. C.

Columbia University, New York, N.Y. See AMNH Types were deposited in the AMNH.

CNHM Chicago Natural History Museum, Chicago, Ill. (formerly Walker Museum, University of Chicago)

Fla. Geol. Sur. Florida Geological Survey, Tallahassee, Fla.

Geol. Dept. State Univ. Iowa Geology Department, State University Iowa, Iowa City, Iowa

Geology Department, Johns Hopkins University, Baltimore, Md. (formerly Maryland Geological Survey). USNM, 1965

GSATC Geological Survey of Alabama, Type Collection, University, Ala. (formerly Alabama Museum of Natural History)

Lab. Geol., Sorbonne, Paris Laboratoire de Géologie de la Faculté des Sciences Université de Paris (Sorbonne), Paris, France

LSU Pal. Mus. Louisiana State University, Paleontological Museum, Baton Rouge, La.

MCZ Museum of Comparative Zoology, Harvard University, Cambridge, Mass.

OUM Oxford University Museum

PRI Paleontological Research Institution, Ithaca, N.Y.

Rutgers Univ. Rutgers University, New Brunswick, N.J.

Safford Coll. Vanderbilt University, Nashville, Tenn. [not found]

State Mus. Trenton, N.J. State Museum, Trenton, N.J.

Univ. Ill. Geology Department, University of Illinois, Urbana, Ill.

Univ. Palermo University of Palermo, Palermo, Sicily

USNM United States National Museum, Washington, D.C.

Wagner Free Inst. Sci. Wagner Free Institute of Science of Philadelphia, Pa.

ABBREVIATIONS

The greater number of abbreviations used are the common geographical forms and need not be indicated here.

clay	cl.
formation	fm.
group	gr.
Landing	Ldg.
limestone	ls.
marl	ml.
manuscript	ms.
member	mem.
sand	sd.
sandstone	ss.
sp., spp.	species, singular and plural
sp. indet.	species indeterminate
young	yg.

Cf. [*confer*, to be compared to] before a generic name indicates the genus is compared to. Cf. after a generic name indicates that the species is compared to.

A question mark placed after a generic name indicates that the genus is questioned; when placed after the specific name the specific determination is questioned.

sic thus, indicates the exact spelling which is incorrect

MOLLUSCA
PELECYPODA**Abra (Abra) nitens (Lea)****Semelidae**

Egeria nitens Lea, 1883, p. 51, pl. 1, fig. 19; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 30

Mysia nitens (Lea), Conrad, App. in Morton, 1834, p. 7; Conrad, 1865a, p. 9

Amphidesma tellinula Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, Harris reprint, 1893, p. 115, pl. 19, fig. 12; Conrad, 1846c, p. 397, pl. 4, fig. 5; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 377; Harris 1895b, p. 45

Abra nitens (Lea), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7 Conrad as author; Dall, 1900, pp. 996, 1015; Harris, 1919, p. 173, pl. 52, figs. 11-13; Brann and Kent, 1960, p. 19

Abra tellinula (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1895b, p. 45

Tellina nitens (Lea), de Gregorio, 1890, p. 223 in part, pl. 35, pl. 17 copy Lea, not figs. 13-16 = *T. cossmanni* Dall, 1900, p. 997; Cossmann, 1893, p. 8

Syndesmya [sic] *tellinula* (Conrad), Cossmann, 1893, p. 8, pl. 1, figs. 7, 8

Abra (Abra) nitens (Lea), Stenzel, Krause, and Twining, 1957, p. 119

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, Nos. 5092, 5093 ANSP; *Amphidesma tellinula* Conrad probable holotype, No. 20263 ANSP Moore, 1962, p. 101

Abra (Abra) nitens jacksonica Harris**Semelidae**

Abra nitens (Lea) var. *jacksonica* Harris in Harris and Palmer, 1946, p. 105, pl. 22, figs. 22-24; Brann and Kent, 1960, p. 19

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Moody Branch, Jackson (type)

Types.—Holotype, No. 4380; paratype, No. 4381 PRI

Abra (Abra) petropolitana Stenzel**Semelidae**

Abra (Abra) petropolitana Stenzel in Stenzel, Krause, and Twining, 1957, p. 119, pl. 12, figs. 1, 2; text fig. 19

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

Type.—Holotype. No. 20673 BEG

Abra tellinula (Conrad)

See *Abra (Abra) nitens* (Lea)

Acanthocardia (Schedocardia) hatchetigbeensis (Aldrich)**Cardiidae**

Cardium hatchetigbeense Aldrich, 1886, p. 39, pl. 4, figs. 12, 12a, 12b; de Gregorio, 1890, p. 216, pl. 33, figs. 2-4 copies Aldrich; Cossmann, 1893, p. 10; Harris, 1897b, p. 59, pl. 12, figs. 2, 2a copies Aldrich; ? fig. 3; Dall, 1900, p. 1080; Trowbridge, 1932, pl. 39, fig. 8 syntype; Brann and Kent, 1960, p. 174 C. ? *hatchetigbeense*

Plagiocardium (*Schedocardia*) *hatchetigbeeense* (Aldrich), Stewart, 1930, p. 255

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

Localities.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R. (type). TEXAS: *Sabinetown Co.*, ? Sabinetown, Sabine R. (Harris)

Types.—Syntypes, No. 638802 (fig. 12b) USNM

***Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)**

Cardiidae

Cardium vicksburgense Tuomey, 1858, pp. 264, 269

Cardium tuomeyi Aldrich, 1886, p. 40, pl. 4, figs. 13, 13a; de Gregorio, 1890, p. 216, pl. 33, figs. 1a, 1b copy Aldrich; Cossmann, 1893, p. 11; Harris, 1897b, p. 60, pl. 12, fig. 4; Harris, 1899b, p. 303 in part, not pl. 53, figs. 9, 10 see cf. *Plagiocardium* sp.; Dall, 1900, p. 1080; Trowbridge, 1932, pl. 39, figs. 6, 7 type; Brann and Kent, 1960, p. 179

Not *Cardium tuomeyi* Aldrich, Sutton, 1946, p. 1681; not Brann and Kent, 1960, p. 179

Cardium (*Cerastoderma*) *tuomeyi* Aldrich var., Barry, 1942+, p. 66, pl. 9, fig. 1; not pl. 8, figs. 4-6 see cf. *Plagiocardium* sp.

Range.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr. Marthaville fm., lower Wilcox [Sabine] gr.

Localities.—ALA.: *Marengo Co.*, Nanafalia Ldg., Tombigbee R. (type). GA.: *Clay Co.*, Fort Gaines. LA.: *Sabine Par.*, rd. cut along La. Highway 26 on W. F. Skinner's farm, 2¼ mi. S. of Belmont; *Natchitoches Par.*, Marthaville

Type.—Holotype, presumably USNM

***Adrana aldrichiana* Harris**

Nuculanidae

Leda (*Adrana*) *aldrichiana* Harris, 1895a, p. 47, pl. 1, fig. 6

Adrana aldrichiana Harris, 1919 p. 71, pl. 25, figs. 20(?), 21; Gardner, 1945, p. 49; Brann and Kent, 1960, p. 29

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner, Mexico), upper Claiborne gr.

Localities.—TEXAS: *Brazos Co.* [or *Burleson Co.*], 1½ mi. below Moseleys Ferry [Stone City Bluff], Brazos R. (type). ? LA.: *Bossier Par.*, Roberta. Mexico; See Gardner, 1945, p. 49

Type.—Holotype, No. 638971 USNM

Aequipecten (*Cyclopecten*) *alabamensis* Aldrich

See *Amusium* (*Propeamusium*) *alabamense* (Aldrich)

Aequipecten (*Nodipecten*) *anatipes* (Morton)

See *Flexopecten anatipes* (Morton)

Aequipecten (*Cyclopecten*) *calvatus* (Morton)

See *Eburnopecten calvatus* (Morton)

Aequipecten centrotus (Dall)

See *Aequipecten perplanus centrotus* (Dall)

Aequipecten choctavensis (Aldrich)

See *Chlamys choctavensis* Aldrich

Aequipecten Deshayesii (Lea)
See *Chlamys deshayesii* (Lea)

Aequipecten (Pseudamussium) frontalis (Dall)
See *Eburneopecten frontalis* (Dall)
See also *Eburneopecten dalli* (Clark)

***Aequipecten perplanus* (Morton) Pl. 1, figs. 8, 9 Pectinidae**

Pecten perplanus Morton, 1833a, p. 293, pl. 5, fig. 5; Morton, 1834, p. 58, pl. 5, fig. 5; pl. 15, fig. 8; d'Orbigny, 1850, p. 393; de Gregorio, 1890, p. 182, pl. 21, figs. 30, 31 copy Morton; Shimer and Shrock, 1944, p. 407; Harris and Palmer, 1946, p. 27, pl. 7, figs. 5-11. Not of authors. *P. poulsoni* of authors, not of Morton, 1834, p. 59. Not *P. spillmani* Gabb, 1860d, as of authors

Aequipecten perplanus (Morton), Teppner, 1922, p. 169 in part

Range.—Oligocene (type)

Locality.—ALA.: "Nummulite limestone, from Claiborne, Alabama" (Morton). Type ANSP labelled "St. Stephens limestone, Ala."

Type.—Holotype, ANSP [not lost as in Harris, 1946, p. 27]

***Aequipecten perplanus* (Morton) "var." Pectinidae**

Pecten perplanus Morton var. Harris, 1951, p. 8, pl. 3, figs. 5-8

Range.—Uppermost Eocene. Bumpnose ls.

Locality.—FLA.: Jackson Co., Marianna Limestone Products Co., quarry, sec. 23, T. 5 N., R. 11 W., Fla., Geol. Sur. J-5, Wayne Moore, 1955, p. 36

Types.—Figured specimens lost

***Aequipecten perplanus centrotus* (Dall) Pectinidae**

Pecten [*Aequipecten*] (*perplanus* var. ?) *centrotus* Dall, 1898b, p. 733, pl. 34, fig. 2. Not in Schuchert, *et al.*, 1905

Aequipecten centrotus (Dall), Teppner, 1922, p. 148

Chlamys (Aequipecten) perplanus centrotus (Dall), Tucker-Rowland, 1938, p. 31, pl. 6, fig. 6 copy Dall

Range.—"Eocene (Vicksburgian ?)", Dall, 1898b, p. 733, Eocene or Oligocene

Locality.—FLA.: St. Johns Co., Ponce de Leon artesian well, depth 225 ft., St. Augustine (type)

Type.—Not found USNM June, 1962

Aequipecten (Nodipecten) pulchricostus (Meyer and Aldrich)
See *Chlamys pulchricosta* (Meyer and Aldrich)

***Aequipecten suwaneensis* Dall Pectinidae**

Pecten (Aequipecten) suwaneensis Dall, 1898b, p. 734; Schuchert, *et al.*, 1905, p. 491; Dall, 1916, pp. 488, 492, in part [as *suwaneensis* sic] not Flint River locality, pl. 83, figs. 2-4; Cooke and Mossom, 1929, p. 57 [as *suwaneensis* sic]

Range.—Upper Eocene. "Ocala ls.", (type) Ocala gr.

Locality.—FLA.: Suwannee Co. (type)

Type.—Syntypes, No. 115777 USNM

Agnocardia claibornensis (Aldrich)**Cardiidae**

Cardium (*Trachycardium*) *claibornensis* Aldrich, 1911, p. 3, pl. 1, fig. 4; Harris, 1919, p. 132, pl. 11, figs. 8 copy Aldrich, 8a as *claibornense*, not 9; Brann and Kent, 1960, p. 173

Trachycardium (*Agnocardia*) *claibornense* (Aldrich), Stewart, 1930, p. 264

Agnocardia claibornensis (Aldrich), Keen, 1937, p. 4

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

Localities.—MISS.: Clarke Co., De Soto (type). ALA.: Monroe Co., Claiborne Bluff, Alabama R. (Harris)

Type.—Holotype, No. 639113 USNM

Agnocardia sp.**Cardiidae**

Cardium (*Agnocardia*) cf. *claibornense* Aldrich, Harbison, 1944, p. 6, pl. 1, figs. 6, 8

Range.—Middle Eocene. Santee ls., upper Claiborne gr.

Locality.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. Moncks Corner

Type.—Figured specimen, ANSP

Alectryonia johnsoni (Aldrich)**Ostreidae**

Ostrea johnsoni Aldrich, 1886, p. 41, pl. 6, fig. 6; de Gregorio, 1890, p. 178; Cossmann, 1893, p. 18; Dall, 1898b, p. 680; Harris, 1919, p. 15, pl. 10, figs. 11-15; Brann and Kent, 1960, p. 635

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—ALA.: "Monroe Co." (type), Claiborne Bluff ("calc. sand-bed") Alabama R.; Lisbon Bluff, Alabama R.; Covington Co., Caton's Bluff, Conecuh R., NNW. of Andalusia. MISS.: Newton Co., Newton (not Ala. as in Dall, 1898b)

Type.—Holotype, No. 638808 USNM

Alectryonia ludoviciana (Harris)**Ostreidae**

Ostrea vicksburgensis ludoviciana Harris, 1919, p. 14, pl. 10, figs. 1-10; ? Harris and Palmer, 1946, pl. 2, fig. 7 not n. var. as on expl. of pl.; Brann and Kent, 1960, pp. 644, 645

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr. ? Upper Eocene. Jackson gr.

Localities.—LA.: Natchitoches Par., Chestnut; Natchitoches; (type localities); ? Caldwell Par., Bunker Hill Ldg., Ouachita R.

Types.—Syntypes, Nos. 389-397 PRI (fig. 3 lost)

Alectryonia vicksburgensis mortoni (Gabb)**Ostreidae**

Ostrea panda Morton 1834, p. 51 in part, "var. from Alab.", pl. 19, fig. 10 [not pl. 10 as in Gabb, 1862a]; H. C. Lea, 1849, p. 103; de Gregorio, 1890, p. 178, pl. 19, fig. 8 copy Morton; fig. 9 not copy Morton as stated; Dall, 1898b, p. 682 under *O. vicksburgensis* Conrad

Ostrea mortonii Gabb, 1862a, p. 329 [not pl. 19, fig. 10 as in Harbison, 1944]; *O. panda* Morton in part=*O. mortoni* Gabb, Ala.; Heilprin, 1884c, p. 311; de Gregorio, 1890, pp. 176, 177; Dall, 1898b, p. 682 under *O. vicksburgensis* Conrad

Ostrea vicksburgensis var. *mortoni* Gabb, Harris, 1919, p. 14; cf. Harbison, 1944, p. 3, pl. 3, fig. 5; Harris and Palmer, 1946, p. 17, pl. 1, fig. 15 copy Morton *O. panda*

Range.—Eocene probably upper (type). Middle Eocene. Cf. Santee ls., upper Claiborne gr., (Harbison)

Localities.—ALA.: Ala. (type) expl. pl. 19, fig. 10. Cf. S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (Harbison)

Type.—ANSP

***Alectryonia vicksburgensis* (Conrad) variations**

Ostreidae

Ostrea vicksburgensis Conrad, 1848b, p. 126 in part; Dall, 1898b, p. 682 in part; Harris and Palmer, 1946, p. 17, pl. 1, fig. 16; pl. 2, figs. 1-6 not fig. 6a; Brann and Kent, 1960, p. 644

Range.—Upper Eocene. Lower Jackson gr.

Localities.—MISS.: Clarke Co., Shubuta. LA.: Caldwell Par., Bunker Hill, Ouachita R.; Gibson Ldg., Ouachita R. (Harris); Winn Par., Tancocks Prairie [= Prairie Home]; Tullos. ALA.: Washington Co., St. Stephens, Tombigbee R.; Choctaw Co., Old Cocoa P.O.; 1 mi. S. Melvin

Types.—Figured specimens, Nos. 4131-4133 PRI

***Alveinus minutus* Conrad**

Kelliellidae

Alveinus minutus Conrad, 1865b, p. 138, pl. 10, fig. 2 as *minuta*; Conrad, 1872a, p. 53, pl. 1, fig. 6; Meyer, 1885a, p. 467; Meyer, 1886b, p. 84, pl. 1, fig. 19; Dall, 1899, p. 883; Dall, 1900, p. 1166; Harris, 1919, p. 110, pl. 37, fig. 15 copy Meyer; Harris, 1920, p. 8, pl. 17, figs. 11-15, text fig. 5; Harris and Palmer, 1946, p. 83, pl. 19, figs. 5, 5a copies Harris, 1920; Brann and Kent, 1960, p. 989; Olsson, 1964, p. 44

Alveinus parvus Conrad, 1865a, p. 10 as *parva nomen nudum*; Conrad, 1866a, p. 24 *nomen nudum*; de Gregorio, 1890, p. 210 not *mimatur* as in synonymy, pl. 30, fig. 14a copy Meyer; fig. 14b copy Conrad; Dall, 1903a, p. 1166

Lutetia parva (Conrad), Cossmann, 1893, p. 13

Range.—Middle Eocene. Sparingly in Gosport sd. [fide Harris and Palmer, 1946, p. 83], uppermost Claiborne gr. Upper Eocene. Lower Jackson gr. (type), Moodys Branch fm.

Localities.—MISS.: Clarke Co., "Enterprise" = Garland Creek fide Aldrich, 1885c, p. 307 (type). LA.: Caldwell Par., Gibson Ldg., Ouachita R. ALA.: Monroe Co., Claiborne Bluff, Alabama R.; Clarke Co., Little Stave Creek; Washington Co., Gopher Hill, Tombigbee R.

Types.—Syntypes (3), No. 13221 ANSP Moore, 1962, p. 75

Alveinus parva [us] Conrad

See *Alveinus minutus* Conrad

Amphidesma linosa Conrad

See *Semele linosa* (Conrad)

Amphidesma profunda Conrad

See *Semele profunda* (Conrad)

Amphidesma tellinula Conrad

See *Abra* (*Abra*) *nitens* (Lea)

Amusium (Propeamussium) alabamense (Aldrich) Amusiidae

Pecten (Pleuronectia) alabamensis Aldrich, 1886, p. 40, pl. 4, fig. 8

Pecten (Amusium) alabamensis Aldrich, de Gregorio, 1890, p. 183, pl. 21, fig. 26 copy Aldrich

Amussium [sic] alabamiense [sic] (Aldrich), Cossmann, 1893, p. 18

Pecten alabamensis Aldrich, Harris, 1894b, p. 41; Harris, 1896, p. 48, pl. 2, fig. 3; Brann and Kent, 1960, p. 655

Variamussium alabamensis (Aldrich), Sacco, 1897c, p. 50

Pecten (Propeamussium) alabamensis Aldrich, Dall, 1898b, p. 757

Amusium (Propeamussium) alabamensis [sic] Aldrich, Tucker-Rowland, 1938, p. 73, pl. 6, fig. 18

Aequipecten (Cyclopecten) alabamensis (Aldrich), Teppner, 1922, p. 220

Amusium (Parvamussium) alabamense (Aldrich), Gardner, 1935, p. 144

Propeamussium alabamensis (Aldrich), Rutsch, 1943, p. 151

Range.—Paleocene. Matthews Ldg. mem., uppermost Porters Cr. fm. (type), upper Midway gr.

Localities.—ALA.: Wilcox Co., Matthews Ldg., Alabama R., 9 mi. W. Camden, sec. 12, T. 12 N., R. 6 E (type); Dale's Branch; Choctaw Co., Naheola. ARK.: Pulaski Co., Little Rock. TEXAS: See Gardner, 1935, p. 145

Type.—Holotype, No. 638806 USNM

Amusium (Pseudamussium) calvatum (Morton)

See *Eburneopecten calvatus* (Morton)

Amusium (Pseudamussium) corneoides Harris, Tucker-Rowland, 1938 in part

See *Eburneopecten scintillatus* (Conrad)

See also *Eburneopecten* sp.

See also *Eburneopecten corneoides* (Harris)

Amusium (Pseudamussium) hamiltonensis Tucker

See *Eburneopecten hamiltonensis* (Tucker)

Amusium ocalanum Dall**Amusiidae**

Pecten (Amusium) ocalanus Dall, 1898b, p. 756, pl. 29, fig. 2; Schuchert, et al., 1905, p. 489

Entolium (Amussium) ocalanum (Dall), Teppner, 1922, p. 96

Amusium (Amusium) ocalanus Dall, Tucker-Rowland, 1938, p. 57, pl. 51, fig. 15

Amusium ocalanum (Dall), Harris, 1951, p. 10, pl. 5, figs. 3-5; Brann and Kent, 1960, p. 40

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—FLA.: Levy Co. (type); Marion Co., Dixie Lime Products Co., Reddick; Ocala Lime Rock Products, E. side of Highway 314 E. of Kendrick (Harris)

Type.—Holotype, No. 137887 USNM

Amusium (Pseudamussium) scintillatus Conrad

See *Eburneopecten scintillatus* (Conrad)

Amusium (Propeamussium) cf. squamulum (Lamarck) Amusiidae

Pecten squamula Lamarck, 1806a, p. 354; Vélin, No. 39, fig. 5; Lamarck, 1819, p. 183; Deshayes, 1830, p. 304, pl. 45, figs. 16-18; Dixon, 1850, p. 172, pl. 3, fig. 29 (*fide* Harris); Deshayes, [1856] 1864, p. 74; Dixon, 1878, p. 214, pl. 3 [4], fig. 29

Amussium [sic] squamula (Lamarck), Cossmann, 1887a, p. 184; Cossmann, 1896a, App. 2, p. 63; Harris, 1897b, p. 44, pl. 7, figs. 2, 2a, 3; Harris, 1919, p. 28, pl. 15, figs. 17, 18, 18a; Brann and Kent, 1960, p. 40

Pecten (Propeamussium) squamula Lamarck ?, Dall, 1898b, p. 757; Tucker-Rowland, 1938, p. 73, pl. 6, fig. 17 copy Harris

Eutolium (Propeamussium) squamula (Lamarck), Teppner, 1922, p. 100

A. squamulum (Lamarck) is a Paris Basin Cuisian-Lutetian species. The American species has been so identified since Harris' grouping in 1897b of the Wilcox [Sabine] specimens with the Parisian. *A. alabamense* Aldrich from the Midway is allied to the Wilcox-Claiborne species. A worthwhile problem would be to make a detailed examination and comparison of the Parisian-American shells to determine their true identity

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr. to Middle Eocene, Cook Mt. fm., upper Claiborne gr.

Localities.—Cf. ALA.: Clarke Co., Woods Bluff, Tombigbee R. (Harris). Cf. LA.: Sabine Par., Negreet Bayou (Harris)

Type.—Type, *Pecten squamula* Lamarck "Cabinet de M. De-france". Université de Caen. Destroyed end of World War II, *fide* André Chavan (pers. com. Sept. 12, 1962). American specimens figured, Woods Bluff, Nos. 186, 187; Negreet Bayou, Nos. 455-457 PRI

Amusium (Pseudamussium) subminutus (Aldrich)

See *Eburneopecten subminutus* (Aldrich)

Anadara vughani (Casey)

See *Barbatia (Plagiarca) vughani* (Casey)

Anapteris regalis Van Winkle**Corbulidae**

Corbula (Anapteris) regalis Van Winkle in Van Winkle and Harris, 1919, p. 7, pl. 1, figs. 1-3; Van Winkle, 1921, p. 10, pl. 1, figs. 2, 3; Brann and Kent, 1960, p. 269

Anapteris regalis Van Winkle, Vokes, 1945, p. 18, pl. 3, figs. 11, 12 syntype, 13, 14 hypotypes

Range.—Lower Eocene. Upper Nanjemoy fm. (type).

Localities.—VA.: Hanover Co., Newcastle, S. side Pamunkey R., 3/4-1 mi. E. of bridge on U.S. 360 (type); King William Co., opposite Retreat plantation on Hanover side of Pamunkey R., about 1 or 2 mi. W. of New Kent

Types.—Syntypes, Nos. 1391, 1392 PRI

Anatina claibornensis Lea

See *Periploma claibornense* (Lea)

Anatina [Anafina sic] complicata (Meyer), Cossmann, 1893

See *Periploma complicatum* (Meyer)

"Anodontia ?" augustana Gardner**Lucinidae**

Loripes subvexa (Conrad), Harris, 1919, p. 119 in part, pl. 39, figs. 2, 4; Brann and Kent, 1960, pp. 512, 513 as *Lucina (Loripes) subvexa*
Anodontia ? augustana Gardner, 1951, p. 9, figs. 1a-e; Cooke and MacNeil, 1952, pp. 22, 23

Range.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R., about 3 ft. below contact of Tallahatta and Lisbon fms. (type); *Henry Co.*, Fort Gaines-Abbeville road S. of bridge over McRae Cr. (paratype); *Houston Co.*, S. slope little Choctawatchee R., St. Highway 66 (paratype). For additional localities in Ala. and S.C. see Gardner, 1951, p. 10

Types.—Holotype, No. 560587; paratype, Nos. 560588, 560590 USNM

Anodontia subvexa (Conrad)

See *Eophysema subvexa* (Conrad)

Anomalocardia rhomboidella (Lea)

See *Barbatia (Plagiarca) rhomboidella* (Lea)

Anomia ephippioides Gabb**Anomiidae**

Anomia ephippioides Gabb, 1860d, p. 388, pl. 67, fig. 59; Conrad, 1865a, p. 15; Cossmann, 1893, p. 19 [as *ephippioides*]; Dall, 1898b, p. 782; Veatch, 1906, p. 37, pl. 19, figs. 2, 2a; Deussen, 1914, p. 59, pl. 5, figs. 2, 2a copies Veatch; Harris, 1919, p. 16 in part, pl. 11, figs. 1-3; Trowbridge, 1923, p. 95 [as *ephippioides*]; Deussen, 1924, p. 67, pl. 22, figs. 6, 6a (copies Veatch) [as *ephippioides*]; Renick and Stenzel, 1931, p. 104 [as *ephippioides*]; Trowbridge, 1932, pl. 43, fig. 2 [as *ephippioides*]; Gardner, 1945, p. 73, pl. 1, figs. 16, 18; Stenzel, Krause, and Twining, 1957, p. 98, pl. 8, figs. 3, 6, 7, 9-12; pl. 9, figs. 1, 2; pl. 11, fig. 7, text figs. 14, 15; Brann and Kent, 1960, pp. 49, 50

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Localities.—TEXAS: *Burleson Co.*, restricted to Stone City Bluff, Brazos R. (type), *fide* Stenzel, Krause, and Twining, 1957, pp. 11, 101 ("Wheelock" type Gabb). For other localities not included by Stenzel, Krause, and Twining see Harris, 1919, p. 16

Types.—Syntypes (9 specimens), No. 2719 ANSP

Anomia ephippioides lisbonensis Aldrich

See *Anomia lisbonensis* Aldrich

Anomia hammetti Harris**Anomiidae**

Anomia navicelloides var. *hammettii* Harris, 1919, p. 18 *navicelloides* [sic], pl. 12, figs. 1, 2 *navicelloides*; Brann and Kent, 1960, p. 50

Anomia hammetti Harris, Gardner, 1945, p. 73 copy original description; Stenzel, Krause, and Twining, 1957, p. 100

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: *Bienville Par.*, Hammett's Branch, SW. ¼ sec. 30, T. 18 N., R. 6 W., about 2 mi. NE. Mt. Lebanon (type): *Sabine Par.*, Bayou Negreet

Types.—Syntypes, Nos. 403, 404, 410 PRI

Anomia jugosa Conrad**Anomiidae**

Anomia jugosa Conrad, 1843, p. 310; Conrad, 1846a, p. 22, pl. 1, fig. 15 [not fig. 14]; Tuomey, 1848, pp. 163, 166, 167; Conrad, 1865a, p. 14; Dall, 1898b, p. 782; Harris, 1919, p. 17; Cooke, 1936, p. 85; Stenzel, Krause, and Twining, 1957, p. 101, pl. 8, fig. 8 type

Range.—Upper Eocene or Oligocene. "white limestone of South Carolina" (type). Cooper marl, Oligocene (Cooke and MacNeil, 1952)

Locality.—S. C. (type)

Type.—Holotype, ANSP *vide* Stenzel, Krause, and Twining, 1957, p. 101 not seen by Moore, 1962, p. 67

Anomia lisbonensis Aldrich**Anomiidae**

Cf. *Anomia* n.sp. Aldrich, 1885c, p. 302

Anomia ephippioidea var. *lisbonensis* Aldrich, 1886, p. 51, pl. 4, fig. 6; de Gregorio, 1890, p. 180, pl. 21, fig. 16

Anomia lisbonensis Aldrich, Dall, 1898b, p. 781; Harris, 1919, p. 17, pl. 11, figs. 6-10; Stenzel, Krause, and Twining, 1957, p. 100; Brann and Kent, 1960, p. 50

Anomia cf. *A. lisbonensis* Aldrich, Gardner, 1945, p. 72, copy original description; Richards and Palmer, 1953, p. 45, pl. 9, fig. 5

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; Avon Park ls., upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); base of Claiborne Bluff, Alabama R.; Hamilton Bluff, Alabama R. TEXAS: *Lee Co.*; *Robertson Co.*, near Wheelock. LA.: *Bien-ville Par.*, Hammetts Branch; *Natchitoches Par.*, Chestnut; *Natchitoches*; *Webster Par.* FLA.: *Levy Co.*, NW. corner SW. $\frac{1}{4}$ sec. 11, T. 14 S., R. 15 E. (Richards and Palmer)

Type.—Holotype. No. 638807 USNM

Anomia marylandica Clark and Martin**Anomiidae**

Anomia marylandica Clark and Martin, 1901, p. 187, pl. 44, figs. 2, 2a, 3; Stenzel, Krause, and Twining, 1957, p. 100

Range.—Paleocene, Aquia fm. Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: *Charles Co.*, Popes Creek (type); Clifton Beach.

VA.: *King George Co.*, Woodstock

Type.—Holotype, USNM

Anomia mcgeei Clark [questionable]**Anomiidae**

(?) *Anomia Ruffini* Conrad, 1844, p. 323; ? Conrad, 1845a, p. 74, pl. 42, fig. 6 (Dall reprint, 1893, p. 100, pl. 42, fig. 6); ? Conrad, 1865a, p. 14; ? Conrad, 1866a, p. 3. Same as *A. mcgeei* Clark, 1895 *vide* Dall, 1898b

Anomia Mcgeei Clark, 1895, p. 5; Clark, 1896, p. 86, pl. 34, figs. 5a, 5b; Dall, 1898b, p. 782 = *Anomia ruffini* Conrad; Clark and Martin, 1901, p. 187, pl. 44, figs. 1, 1a copy type; Stenzel, Krause, and Twining, 1957, p. 100

Range.—Eocene or Miocene

Locality.—VA.: "*Hanover Co.*" (type)

Type.—Unknown. Not JHU or ANSP

Anomia navicelloides Aldrich**Anomiidae**

Anomia navicelloides Aldrich, 1898, p. 97; Dall, 1898b, p. 782; Aldrich, 1903, p. 99, pl. 4, figs. 13, 14; Stenzel, Krause, and Twining, 1957, p. 100

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., near Choctaw Corner (type)

Type.—Holotype, No. 639005 USNM

Anomia navicelloides hammettii Harris

See *Anomia hammetti* Harris

Anomia rufa Barry**Anomiidae**

Anomia rufa Barry, 1942+, p. 55, pl. 3, fig. 9; pl. 6, figs. 1, 2; Stenzel, Krause, and Twining, 1957, p. 100

Range.—Paleocene. "Logansport fm." [name preoccupied], middle Midway gr.; Hall Summit fm. (type), upper Midway gr.

Localities.—LA.: Sabine Par., rd. cut in the center of sec. 12, T. 8 N., R. 14 W., about 6 mi. SW. of Zwolle (type); along rd. on sec. line between secs. 7 and 18, T. 9 N., R. 11 W.; De Soto Par., rd. cut along La. Highway 745 in SW. $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 10 N., R. 13 W.; auger hole on hillside on S. side of Hunter-Converse Highway, 0.1 mi. N. of De Soto-Sabine Par. line

Types.—Syntypes, Nos. 5008, 5008-A, 5010 LSU Pal. Mus.

Anomia ruffini Conrad [questionable]**Anomiidae**

Anomia ruffini Conrad, 1844, p. 323; ? Conrad, 1845a, p. 74, pl. 42, fig. 6 (Dall reprint, 1893, p. 100, pl. 42, fig. 6); Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Clark, 1896, p. 93, doubtful Eocene; Dall, 1898b, p. 782 *A. mcgeei* Clark equals *A. ruffini* Conrad

Range.—?[Described with Miocene species, Conrad, 1844, 1845a]

Localities.—VA.: "Kent Co.", "Pamunkey R." (type) [Dall adds Waterloo, New Kent Co., Pamunkey R.]

Type.—ANSP *fide* H. Richards, Dec. 1962

Anomia ruffini (?) Conrad

See *Anomia mcgeei* Clark

Anomia sellardsi Stenzel in Renick and Stenzel *nomen nudum*

Anomia sellardsi Stenzel in Renick and Stenzel, 1931, p. 90, pl. 6, figs. 3, 4; Stenzel, Krause, and Twining, 1957, p. 100 = *nomen nudum* (Weches fm.)

Anomia, n. sp.**Anomiidae**

Anomia, n. sp., Aldrich, 1885c, p. 302; Aldrich, 1886, p. 9; de Gregorio, 1890, p. 180. This species was never described. The reference is only included for completeness in the search of literature. See *Anomia lisbonensis* Aldrich

Anomia sp.**Anomiidae**

Anomia sp. Harris, 1897b, p. 42, pl. 6, fig. 10; Brann and Kent, 1960, p. 51

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.

Type.—Figured specimen, No. 220 PRI

Anomia sp.

Anomiidae

Anomia sp., Kellum, 1926, p. 21, pl. 2, fig. 10

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Locality.—N.C.: Pitt Co. (or Craven Co.), 3 mi. E. of Quinerly.

For additional localities see Kellum

Type.—Figured specimen, No. 353251 USNM

Arca Aldrichi (Dall)

See cf. *Cucullaria aldrichi* (Dall)

Arca cancellata Tuomey, 1853

See *Arca* sp. c, Kellum

Arca cuculoides Conrad

See *Barbatia cuculoides* (Conrad)

Arca (Barbatia) cuculoides Conrad "var.", Renick and Stenzel

See *Barbatia (Barbatia) uxorispalmeri* Stenzel and Krause

Arca cuculoides ludoviciana Harris

See *Barbatia (Cucullaearca) ludoviciana* (Harris)

Arca harrisi Sheldon

See cf. *Striarca harrisi* (Sheldon)

Arca (Arca) hatchetigbeensis Harris

Arcidae

Arca subprotracta Heilprin, Aldrich, 1886, p. 50. Not Heilprin 1882b, p. 449

Arca hatchetigbeensis Harris, 1897b, p. 47, pl. 7, figs. 10, 10a; Dall, 1898b, p. 622; Sheldon, 1917, p. 6, pl. 1, figs. 1-3; Stewart, 1930, p. 85; Reinhart, 1943, p. 23; Brann and Kent, 1960, p. 64

Arca (Arca) hatchetigbeensis Harris, Stenzel, Krause, and Twining, 1957, p. 56

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R., (type)

Type.—Holotype, No. 193 PRI

Arca inornata Meyer

See cf. *Striarca harrisi* (Sheldon)

Arca (Barbatia) lignitifera Aldrich

See *Barbatia lignitifera* Aldrich

Arca lima Conrad "var." Aldrich

See *Barbatia cuculoides* (Conrad) subsp.

Arca (cuculoides?) ludoviciana Harris

See *Barbatia (Cucullaearca) ludoviciana* (Harris)

See also *Barbatia (Cucullaearca)* sp.

Arca ludoviciana* Harris, Deussen, 1924**See *Barbatia* (*Barbatia*) *uxorispalmeri* Stenzel and KrauseArca* (*Cucullaearca*) *macrodonta* (Whitfield)**See *Cucullaea macrodonta* Whitfield***Arca onochela* (Rogers and Rogers)**See *Cucullaea gigantea* Conrad***Arca ozarkensis* Aldrich**See *Cucullaria ozarkensis* (Aldrich)***Arca pectuncularis* (Lea)**See ? *Pachecoa* (? *Pachecoa*) *pectuncularis* (Lea)***Arca* (*Arca*) *petropolitana* Stenzel and Krause****Arcidae***Arca* (*Arca*) *petropolitana* Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 56, pl. 5, figs. 1-4*Range*.—Middle Eocene. Stone City beds (type), middle Claiborne gt.*Locality*.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)*Type*.—Holotype, No. 20711 BEG***Arca quindecemradiata* Gabb****Arcidae***Arca quindecemradiata* Gabb, 1860b, p. 95, pl. 2, fig. 2; Meek, 1864, p. 9; Whitfield, 1885, p. 208, pl. 27, figs. 10-13; Johnson, 1905, p. 9; Weller, 1907, p. 410, pl. 34, figs. 2, 3

For complete Cretaceous synonymy see Weller, 1907

Range.—Lower Eocene. Vincentown fm. (Weller) (type horizon in doubt).*Localities*.—N. J.: "New Jersey" (type). *Ocean Co.*, near New Egypt (Whitfield); *Gloucester Co.*, near Hurffville (Weller)*Type*.—ANSP (Johnson, 1905)**"*Arca reticulata* Gmelin"**See *Barbatia* (*Acar*) *aspera* (Conrad)***Arca* (*Scapharca*) *rhomboidella* Lea**See *Barbatia* (*Plagiarca*) *rhomboidella* (Lea)See also *Barbatia deussenii* Gardner***Arca* cf. *rhomboidella* Lea "var." Harris, 1951**See *Barbatia* (*Plagiarca*) cf. *rhomboidella* (Lea) "var."***Arca rhomboidella* Lea var. *Vaughan***See *Barbatia* (*Plagiarca*) *vaughani* Casey***Arca rhomboidella* *parsaba* Harris**See *Barbatia* (*Plagiarca*) *rhomboidella* *parsaba* (Harris)***Arca rhomboidella* *subscopula* Harris**See *Barbatia* (*Plagiarca*) *rhomboidella* *subscopula* (Harris)***Arca rogersi* Heilprin**See *Cucullaea transversa* Rogers and Rogers***Arca* (*C.*) *Rogersiana* Nyst, 1848**See *Cucullaea transversa* Rogers and Rogers

Arca saffordi GabbSee *Cucullaea saffordi* (Gabb)*Arca subprotracta* Heilprin, Aldrich, 1886. Not Heilprin, 1882b (= Oligocene)See *Arca* (*Arca*) *hatchetigbeensis* Harris*Arca subprotracta* Heilprin, 1882b, p. 449 for *Byssosarca protracta* Conrad, 1848b, p. 126 VicksburgNot *Arca protracta* Rogers and Rogers, 1837, p. 332 (reprint, 1884, p. 662)*Arca* (*Cucullaearca*) *transversa* (Rogers and Rogers)See *Cucullaea transversa* Rogers and Rogers*Arca* (*Scapharca*) *vaughani* CaseySee *Barbatia* (*Plagiarca*) *vaughani* (Casey)*Arca* sp. Harbison, 1944See *Barbatia* (*Cucullaearca*) sp.**Arca** sp.**Arcidae***Arca* sp. Harris, 1896, p. 50, pl. 3, figs. 8, 9, 9a; Brann and Kent, 1960, p. 77*Range*.—Paleocene. Midway gr.*Localities*.—GA.: *Clay Co.*, Chattahoochee R., not far above mouth of Sandy Cr. (base of Midway), Fort Gaines. ALA.:*Wilcox Co.*, 1 mi. N. of Midway*Types*.—Figured specimens, Nos. 59-61 PRI**Arca** sp.**Arcidae***Arca* sp. indet. Gardner, 1935, p. 132*Range*.—Paleocene. Wills Point fm., upper Midway gr.*Locality*.—TEXAS; *Freestone Co.*, Butler Dome, ¼ mi. NW. of Gin Lake*Type*.—Specimen probably USNM**Arca** (s.l.) spp.**Arcidae***Arca* s.l. spp. Gardner, 1935, p. 132*Range*.—Paleocene. Littig mem., Kincaid fm., lower Midway gr.*Localities*.—TEXAS: *Travis Co.*, Wilbarger Cr. near Littig (USGS Sta. 11676); *Bastrop Co.*, Half Mile Cr., Austin Quad. (USGS Sta. 11678); *Caldwell Co.*, 1½-2 mi. S. Mendoza (USGS Sta. 11681); 4 mi. S. Lockhart, Martindale farm (USGS Sta. 11689)*Types*.—Specimens probably USNM**Arca** sp. a**Arcidae***Arca* sp. a, Kellum, 1926, p. 16, pl. 1, figs. 13, 14*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.*Localities*.—N.C.: *New Hanover Co.*, Wilmington; *Pender Co.*, old Rocky Point*Types*.—Figured specimens, Nos. 353300, 353301 USNM

Arca sp. b**Arcidae**

Arca sp. b, Kellum, 1926, p. 16, pl. 1, fig. 15

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Locality.—N.C.: *New Hanover Co.*, Wilmington

Type.—Figured specimen, No. 353304 USNM

Arca sp. c**Arcidae**

Cf. *Arca cancellata* Tuomey, 1853, p. 194. Not *Arca cancellata* Gmelin, 1791, p. 3308; not Martin in J. de C. Sowerby, 1824, p. 115, pl. 473; not Phillips, 1829, pp. 171, 190 *Cucullaea cancellata*

Arca cancellata Tuomey, Dall, 1898b, p. 658; Miller and Stephenson, 1912, p. 55

Arca sp. c Kellum, 1926, p. 16

Range.—Upper Eocene. Castle Hayne ls., Jackson gr. Tuomey specimens involve a Cretaceous mixture with Eocene near Wilmington, N.C. Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333, 334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

Locality.—N.C.: *New Hanover Co.*, Wilmington

Types.—Figured specimens Nos. 353315, 353298 USNM (Kellum), *A. cancellata* Tuomey unknown.

Arcopagia alta (Conrad)

See *Tellina alta* (Conrad)

Arcoperna filosa ConradPl. 2, fig. 3 **Mytilidae**

Arcoperna filosa Conrad, 1865a, p. 10; Conrad, 1865b, p. 140, pl. 10, fig. 14

Modiolus filusos (Conrad), Dall, 1898b, p. 792

VolSELLA (*Arcoperna*) *filosa* (Conrad), Harris and Palmer, 1946, p. 43, pl. 10, fig. 13 copy Conrad

Range.—Upper Eocene. Lower Jackson gr. (type)

Locality.—MISS.: *Clarke Co.*, "Enterprise" error for Garland Creek *fide* Aldrich, 1885c, p. 307 (type)

Type.—Holotype, No. 13230 ANSP Moore, 1962, p. 61

Arcoperna ? sp.**Mytilidae**

Arcoperna [sic] sp. Harris, 1951, p. 26, pl. 13, fig. 12

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, 3.9 mi. from Perry

Type.—Figured specimen, No. 24529 PRI [omitted in Brann and Kent, 1960]

Arcoperna ? sp.**Mytilidae**

Arcoperna sp. Harris, 1951, p. 26, pl. 13, fig. 13

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Clinchfield Quarry, west side

Type.—Figured specimen, No. 24530 PRI [omitted in Brann and Kent, 1960]

Artemis lenticularis (Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

Astarte aldrichiana (Harris)

See cf. *Miodontiscus aldrichiana* (Harris)

Astarte (Goodallia?) americana Dall**Astartidae**

Astarte (Goodallia?) americana Dall, 1903a, p. 1496, pl. 56, fig. 5; Schuchert, *et al.*, 1905, p. 68; Harris, 1919, p. 200, pl. 32, fig. 30 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 109280 USNM

"Astarte callosa" Conrad sp. dubious**Astartidae**

Astarte callosa Conrad, 1833b, p. 38, not pl. 20, fig. 3 (Harris reprint, 1893, p. 60); H. C. Lea, 1849, p. 96; de Gregorio, 1890, p. 200; Harris, 1895b, p. 9 [*collosa* sic in reference]; Harris, 1919, p. 200

Range.—Middle Eocene, Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, missing ANSP *fide* Harris, 1895b, p. 9; Moore, 1962, p. 44

"Astarte" castanella Whitfield**Astartidae**

Crassina? veta Conrad, 1869b, p. 41, pl. 1, fig. 5

Not *Astarte veta* Conrad, 1869a, p. 279, pl. 20, fig. 4 (not fig. 5 as in text see *errata* vol. 5, p. 227)

Astarte castanella Whitfield, 1885, p. 231, pl. 30, figs. 1, 2; Whitfield, 1899, p. 154; Dall, 1903a, p. 1488

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N.J.: Monmouth Co., Shark R. (type); Farmingdale; Squankum

Type.—Holotype, AMNH

Astarte cellinoides [sic] Tuomey, 1850, p. 148 error for *A. tellinoides*
See *Lirodiscus tellinoides* (Conrad)

Astarte conradi Dana

See *Pteropsella lapidosus* (Conrad)

Astarte Conradi Buckley, 1874. Not Dana, 1863

See *Lirodiscus smithvillensis* (Harris)

Astarte Conradi (=young of *Crassatella alta*) Heilprin

See *Pteropsella lapidosus* (Conrad)

Astarte conspicua de Gregorio

Astarte conspicua de Gregorio, 1890, p. 200, pl. 27, figs. 21-25; Coss-mann, 1893, p. 13

Locality doubtful.—Not Claiborne Eocene. Holotype formerly De Gregorio Collection, University of Palermo, Sicily Lost

Astarte (Lirodiscus) jacksonensis Meyer

See *Lirodiscus jacksonensis* (Meyer)

"Astarte" marylandica Clark**Astartidae**

Astarte marylandica Clark, 1895, p. 5; Clark, 1896, p. 80, pl. 21, fig. 2; Clark and Martin, 1901, p. 183, pl. 42, fig. 5 type; Dall, 1903a, p. 1488 [Cf. with *Lirodiscus*]

Range.—Paleocene. Aquia fm. (type).

Localities.—MD.: *Prince Georges Co.*, Upper Marlboro (type); Brooks Estate near Seat Pleasant; *Anne Arundel Co.*, Sheckel's Farm near South R.

Type.—Holotype, USNM

Astarte minor Lea

See *Crassinella minor* (Lea)

Astarte minutissima Lea

See *Micromeris minutissima* (Lea)

Astarte monroensis Meyer

See *Cuna monroensis* (Meyer)

Astarte neuseana Harris

See cf. *Crassinella neuseana* (Harris)

"Astarte" newtonensis Aldrich**Astartidae**

Astarte newtonensis Aldrich, 1910a, p. 121, pl. 11, figs. 2, 3

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: *Newton Co.*, Beulah P.O. (type)

Type.—Holotype, No. 639101 USNM

Astarte Nicklinii Lea

See *Lirodiscus tellinoides* (Conrad)

Astarte Nicklinii ebla de Gregorio, 1890, p. 199

See *Lirodiscus tellinoides* (Conrad)

Astarte parilis Conrad, 1854. Not Conrad, 1853a

See *Lirodiscus jacksonensis* Meyer

Astarte parva Lea

See *Cuna parva* (Lea)

"Astarte" pitua de Gregorio**Astartidae**

Astarte pitua de Gregorio, 1890, p. 200, pl. 27, figs. 26-29; Coss-mann, 1893, p. 13; Harris, 1919, p. 201 "delete from Eocene literature"

Unknown in Eocene. Specimen probably mixed. Holotype, formerly De Gregorio Collection, University of Palermo, Palermo, Sicily. Lost

"Astarte" planimarginata Whitfield**Astartidae**

Astarte planimarginata Whitfield, 1885, p. 232, pl. 30, figs. 3, 4; Whitfield, 1899, p. 154; Dall, 1903a, p. 1488

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N. J.: *Monmouth Co.*, Shark R. (type); Squankum; Farmingdale

Type.—Holotype, AMNH

"Astarte proruta" Conrad**Astartidae**

Astarte proruta Conrad, 1833b, p. 38 not pl. 20, fig. 4 (Harris reprint, 1893, p. 60); H. C. Lea, 1849, p. 96; de Gregorio, 1890, p. 199; Harris, 1895b, p. 37; Harris, 1919, p. 201

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Lost fide Harris, 1895b, p. 37, Moore, 1962, p. 90

Astarte protracta Meyer

See *Lirodiscus protractus* (Meyer)

Astarte recurva Lea

See *Lucina (Recurvella) dolabra* Conrad

Astarte (Micromeris) senex (Meyer)

See "*Venericordia*" sp.

Astarte smithvillensis Harris

See *Lirodiscus smithvillensis* (Harris)

Astarte smithvillensis Harris "var."

See *Lirodiscus smithvillensis* Harris "var." Harris, 1897a

See also *Lirodiscus smithvillensis* (Harris)

Astarte smithvillensis mediavia Harris

See *Lirodiscus mediavia* (Harris)

Astarte (Micromeris) subparva Meyer

See *Cuna parva* (Lea)

"Astarte" subpontis Harris**Astartidae**

Astarte subpontis Harris, 1896, p. 62, pl. 5, figs. 5, 5a, 5b; Brann and Kent, 1960, p. 94

This is not *Astarte*. Its generic placement is undecided.

Range.—Paleocene, "Very top of Midway" gr. (type)

Locality.—GA.: Clay Co., Chattahoochee R. ("very top of Midway") (type)

Type.—Holotype, No. 50 PRI

Astarte sulcata Lea

See *Lirodiscus tellinoides* (Conrad)

Astarte sulcata jacksonensis Meyer

See *Lirodiscus jacksonensis* (Meyer)

Astarte tellinoides Conrad, Heilprin, 1891a. Not Conrad, 1833a

See *Lirodiscus smithvillensis* (Harris)

Astarte tellinoides Conrad

See *Lirodiscus tellinoides* (Conrad)

Astarte (Lirodiscus) tellinoides scutellaria Harris

See *Lirodiscus tellinoides scutellaria* Harris

"Astarte" triangulata Meyer**Astartidae**

Astarte triangulata Meyer, 1886b, p. 80, pl. 3, figs. 21, 21a; Cossmann, 1893, p. 13; Dall, 1903a, p. 1488; Harris and Palmer, 1946, p. 76, pl. 18, figs. 11-14; Brann and Kent, 1960, p. 95

¹*Range*.—Upper Eocene. Jackson gr. (Harris). Oligocene. Red Bluff clay (type)

Localities.—ALA.: Choctaw Co., 1 mi. S. of Melvin; Clark Co., 3 mi. W. of Grove Hill (Harris). MISS.: Wayne Co., Red Bluff, Hiwanee Station, Chickasawhay R. (type); Clarke Co., S. of Shubuta (Harris)

Type.—Holotype, No. 644598 USNM

"Astarte" triangulatooides Harris

Astartidae

Astarte triangulatooides Harris, 1919, p. 91, pl. 32, figs. 12, 12a; Brann and Kent, 1960, p. 95

Range.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

Type.—Holotype, No. 689 PRI

Astarte unguina Conrad

See *Diplodonta unguina* (Conrad)

Astarte sp.

Astartidae

Astarte sp. Gardner, 1945, p. 150

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS; Travis Co., USGS Sta. 5282, bluff at Webberville

Type.—Unfigured specimen probably USNM

Astarte ? Renick and Stenzel, 1931

See *Pteropsella lapidosa* (Conrad) Renwick and Stenzel, 1931, loc. 4

See also *Pteropsella praelapidosa* (Stenzel and Krause), Renwick and Stenzel, 1931, loc. 1 only

Atrina cawcawensis (Harris)

Pinnidae

Pinna cawcawensis Harris, 1919, p. 31, pl. 16, figs. 12, 13 and pl. 17, figs. 1, 2; Brann and Kent, 1960, p. 690

Atrina cawcawensis (Harris), Stenzel, Krause, and Twining, 1957, p. 78, pl. 7, fig. 9 and text fig. 11

Range.—Middle Eocene. Stone City beds, middle Claiborne gr.; McBean fm. (type), upper Claiborne gr.

Localities.—S.C.: Orangeburg Co., 5 mi. N. of Orangeburg, "Columbia Road" (type). TEXAS: Burleson Co., Stone City Bluff, Brazos R.

Types.—Syntypes, Nos. 474, 475, 476 PRI

Atrina gardnerae (Barry)

Pinnidae

Pinna gardnerae Claypool, 1933, p. 6 abstract *nomen nudum*; Barry, 1942+, p. 50, pl. 3, figs. 1-3

This species was not described or figured by Claypool. The name was a *nomen nudum* until described and figured by Barry in 1942.

Range.—Paleocene. "Logansport" fm. [name preoccupied], middle Midway gr.; Kerens mem. (type), Wills Point fm., upper Midway gr.

Localities.—TEXAS: Navarro Co., Old Humble Pumping Station, W. bank of Trinity R. about 5.5 mi. NE. of Kerens (type).

LA.: Sabine Par., rd. cut on W. side of La. Highway 180 about

2½ mi. NE. of Pleasant Hill; *Natchitoches Par.*, field N. of farmhouse on La. Highway 404 and 429 about 4½ mi. S. of Ajax; rd. cut in NW. ¼ SE. ¼ sec. 33, T. 10 N., R. 10 W. along dirt rd. leading W. from La. Highway 404 (paratype)

Types.—Holotype (Barry designation), Univ. Ill.; paratype ("hypotype") No. 5007, LSU Pal. Mus.

***Atrina gravida* (Harris)**

Pinnidae

Pinna gravida Harris, 1919, p. 30, pl. 16, figs. 8-11; Brann and Kent, 1960, pp. 690, 691

Atrina gravida (Harris), Gardner, 1945, p. 61 in part; Stenzel, Krause, and Twining, 1957, p. 79

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: Winn Par., St. Maurice (type)

Types.—Syntypes, Nos. 470, 471, 472, 473 PRI

***Atrina jacksoniana* Dall**

Pinnidae

——— Lesueur, 1829 ms., Walnut Hills Fossils, pl. 5, fig. 5
vide Dall, 1898b, p. 662

Atrina jacksoniana Dall, 1898b, p. 662; Schuchert, *et al.*, 1905, p. 76; Gardner, 1945, p. 61 in part; Stenzel, Krause, and Twining, 1957, p. 79

Pinna (*Atrina*) *jacksoniana* Dall, Harris and Palmer, 1946, p. 39, pl. 10, figs. 5, 6; Brann and Kent, 1960, p. 691

Cf. *Atrina jacksoniana* Dall, Harris, 1951, p. 13 in part, pl. 6, fig. 5; Brann and Kent, 1960, p. 105

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type); "Ocala ls.", Ocala gr., Ga. (Harris)

Localities.—MISS.: Hinds Co., Jackson, "Green's marl bed" [No. 136645 USNM "cotype"]; Clarke Co., Garland's Cr., near Shubuta (type). LA.: Sabine Par., Wooley's Bluff; Grant Par., Creole Bluff, Red R. (Harris). GA.: Houston Co., Clinchfield Quarry (Harris)

Types.—Lectotype. No. 137831 USNM herein designated; paralectotype, No. 643768 USNM (13 specimens)

There are 14 specimens in the original material of Dall in the USNM No. 137831. The "cotypes" listed by Schuchert, *et al.*, No. 136645, are so fragmentary that they were excluded from the type material. One specimen of the 137831 lot is selected as lectotype and retains that number. The remaining 13 specimens, paratypes, are recatalogued, No. 643768 USNM

***Atrina quadrata* (Dall)**

Pinnidae

Pinna quadrata Dall, 1898b, p. 660, pl. 29, fig. 7; Schuchert, *et al.*, 1905, p. 508; Harris, 1951, p. 12, pl. 6, figs. 2-4; Brann and Kent, 1960, p. 691

Range.—Upper Eocene "Ocala ls." (type), Ocala gr.

Localities.—FLA.: Marion Co., Richard's quarry, Ocala (type); Ocala Lime Rock Corp., E. of Kendrick; Dixie Lime Products Co., Reddick; Levy Co., Johnson's lime sink; Alachua Co., Arredondo (Dall)

Type.—Holotype, No. 112508 USNM

Atrina rostriformis (Morton)**Pinnidae**

Pinna sp. Morton, 1834, p. 63

Pinna rostriformis Morton, 1842, p. 132; Morton, 1842a, p. 214, pl. 10, fig. 5; Gabb, 1861, p. 223; Meek, 1864, p. 9; Whitfield, 1885, p. 198, pl. 16, figs. 3, 4; Whitfield, 1899, p. 163; Johnson, 1905, p. 10; Weller, 1907, p. 420, pl. 37, figs. 2, 3

Range.—Lower Eocene. Vincentown fm. (type).

Localities.—N. J.: *Burlington Co.*, Cookstown; boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

Type.—ANSP (Johnson, 1905)

Atrina sp.**Pinnidae**

Pinna sp. Vaughan, 1896, p. 51, fragments cf. *P. argentea* Conrad; Dall, 1898b, p. 665

Range.—Upper Eocene. Lower Jackson gr.

Locality.—LA.: *Grant Par.*, Creole Bluff [Montgomery], Red R.

Type.—Specimens missing, USNM

Atrina sp.**Pinnidae**

Pinna sp. Aldrich, 1886, p. 49; Dall, 1898b, p. 665; Harris, 1919, p. 31

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—ALA.: *Clarke Co.*, Coffeetown, Tombigbee R.

Type.—Specimen not found (not USNM)

Atrina sp.**Pinnidae**

Pinna sp. Aldrich, 1886, p. 58; Dall, 1898b, p. 665

Range.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.

Locality.—ALA.: *Marengo Co.*, Nanafalia, Tombigbee R.

Type.—Specimen not found (not USNM)

Atrina sp.**Pinnidae**

Pinna sp. Aldrich, 1886, p. 54; Harris, 1897b, p. 46, pl. 7, fig. 8; Dall, 1898b, p. 665; Brann and Kent, 1960, p. 691

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

Type.—Aldrich specimen listed not found (not USNM); Harris figured specimen, No. 191 PRI

Avicula annosa Conrad

See *Pteria* ? *annosa* (Conrad)

Avicula argentea Conrad

See "*Pteria* cf. *argentea*" (Conrad)

Avicula cardinocrassa de Gregorio

See *Pteria limula* (Conrad)

Avicula claibornensis Lea

See *Pteria limula* (Conrad)

Avicula limula Conrad

See *Pteria limula* (Conrad)

Avicula limula Conrad, Aldrich, 1886 not Conrad, 1833c
See *Pteria* sp.

Avicula sp. Harris, 1896
See *Pteria* sp.

Avicula sp. Harris, 1897b
See *Pteria* sp.

"Axinaea" bellasculpta Conrad

"*Axinaea*" *bellasculpta* Conrad, 1860, p. 295; Conrad, 1865a, p. 12;
Dall, 1898b, p. 607 = *Glycymeris arcata* Conrad

Range.—? Oligocene *vide* Dall, 1898b, p. 607

Locality.—"Mississippi. Dr. Spillman" Conrad, 1860

Type.—Specimen not known (not listed by Moore, 1962)

Axinaea [*Axinea* sic] *conradi* Whitfield
See *Glycymeris conradi* (Whitfield)

Axinaea duplistria Conrad, 1865b
See *Glycymeris filosa* (Conrad)

Axinaea filosa (Conrad)
See *Glycymeris filosa* (Conrad)

Axinaea idonea (Conrad)
See *Glycymeris idonea* (Conrad)

Axinaea inequistria Conrad, 1865b
See *Glycymeris filosa* (Conrad)

Axinaea intercostata Gabb
See *Glycymeris intercostata* (Gabb)

Axinaea staminea (Conrad)
See *Glycymeris staminea* (Conrad)

Axinaea trigonella (Conrad)
See *Glycymeris trigonella* (Conrad)

Barbatia (*Cucullaria*) *aldrichi* Dall
See cf. *Cucullaria aldrichi* (Dall)

Barbatia (Acar) aspera (Conrad)

Arcidae

Navicula aspersa Conrad in Wailes, 1854, p. 289, listed only, pl. 14, fig. 5 (reprint 1939, p. 19, pl. 1, fig. 5); Conrad, 1856a, p. 258 (reprint 1939, p. 4) as *aspera*; Dall, 1898b, p. 615 footnote; Sheldon, 1917, p. 14

Barbatia (*Calliarca*) [*sic*] *aspera* (Conrad), Conrad, 1866a, p. 23

Barbatia (*Calloarca*) *cuculoides* (Conrad), Dall, 1898b, p. 624 in part

Barbatia (Acar) *reticulata* (Gmelin), Dall, 1898b, p. 629 in part;
Dall, 1915, p. 120 Eocene only; Reinhart, 1935, p. 24. Not *Arca reticulata* Gmelin, 1791, p. 3311. Recent

Arca reticulata Gmelin, Sheldon, 1917, pp. 14, 20 in part. Not *A. reticulata* Gmelin, 1791, p. 3311. Recent

Barbatia jacksonensis Cooke, 1926b, p. 137, figs. 13a, b *vide* Bartsch (pers. com. April 30, 1941)

Arca (Acar) *reticulata* Gmelin, Harris, 1919, p. 55, pl. 22, figs. 18, 19; Brann and Kent, 1960, pp. 73, 74. Not *A. reticulata* Gmelin. Recent

Barbatia sp. cf. *domingensis* (Lamarck), Gardner, 1945, p. 54 in part
Not *A. Domingensis* Lamarck, 1819, p. 40

Barbatia (Acar) *aspera* (Conrad), Harris and Palmer, 1946, p. 47, pl. 11, figs. 12, 13; Brann and Kent, 1960, p. 115

Conrad (1854) first spelled the name of the species *aspera*. Thereafter (1856a; 1866a) he changed the spelling to *aspera* (meaning *rough*) which he probably intended to indicate. In 1854, although the shell is figured, the name was listed only and not described. It is, therefore, a *nomen nudum* and date of publication is 1856a with the spelling of *aspera*. The name *Navicula aspera* is not preoccupied by *Arca aspera* Philippi, 1844, p. 43 [not 1836 as in Dall, 1898b] as indicated by Dall and followed by Sheldon.

Range.—Middle Eocene. Weches fm., middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr. Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Wau-tubbee; *Newton Co.*, Hickory. TEXAS: *Bastrop Co.*, Smithville, Colorado R.

Type.—Missing Moore, 1962, p. 40. Holotype *Barbatia jacksonensis* Cooke, No. 353949 USNM

***Barbatia corvamnisi* Harris**

Arcidae

Barbatia corvamnisi Harris in Harris and Palmer, 1946, p. 46, pl. 11, figs. 9-11; Wilbert, 1953, pp. 98, 123; Brann and Kent, 1960, p. 115

Range.—Upper Eocene. White Bluff fm., lower Jackson gr. (Wilbert); upper Jackson gr. (Crow Creek, Ark.) (type)

Localities.—ARK.: *St. Francis Co.*, Crow Creek, 2 mi. E. of Forrest City (type); *Jefferson Co.*, White Bluff, Arkansas R. (Wilbert)

Types.—Holotype, No. 4198; paratypes Nos. 4199, 4200 PRI

***Barbatia* (*Cucullaearca*) *cuculloidis* (Conrad)**

Arcidae

Arca cuculloidis Conrad, 1833b, p. 37, not figured (Harris reprint, 1893, p. 59); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 391; Harris, 1895b, p. 14; Sheldon, 1917, p. 13, pl. 2, figs. 8-12; Aldrich, 1931, p. 7, pl. 6, figs. 1, 2. Thought from sand at Claiborne [?]

Eyssoarca cuculloidis (Conrad), Conrad, 1846b, p. 219; Harris, 1919, p. 54, pl. 22, fig. 17 holotype

Barbatia lima Conrad, 1848a, p. 295; Conrad, 1848b, p. 125, pl. 13, fig. 23 = "*Arca conradi* Deshayes" [*nomen nudum*, Deshayes Cat. USNM not published]; not *Arca lima* Reeve, 1844a, p. 125 *vide* Dall, 1898b, p. 615

Navicula cuculloidis (Conrad), Conrad, 1854, p. 29

Navicula lima (Conrad), Conrad, 1854, p. 29

Cucullaearca lima (Conrad), Conrad, 1865a, p. 11

Cucullaearca cuculloidis (Conrad), Conrad, 1865a, p. 11

Cucullarca [sic] *cuculloidis* (Conrad), Conrad, 1866a, p. 4

Arca (*Cucullaearca*) *cuculloidis* Conrad, de Gregorio, 1890, p. 195 in part, not pl. 24, figs. 17-20 [= *rhomboidella* Lea]

Barbatia (*Calloarca*) *cuculloidis* (Conrad), Dall, 1898b, pp. 615, 624

Barbatia (*Cucullaearca*) *cuculloidis* (Conrad), Reinhart, 1935, p. 27; Reinhart, 1943, p. 33; Harris and Palmer, 1946, p. 45, pl. 11, figs. 1-3; Brann and Kent, 1960, p. 115

Arca (Barbatia) cuculloid (Conrad), Harris, 1951, p. 15, pl. 6, fig. 9; pl. 7, fig. 1; Brann and Kent, 1960, pp. 61, 62

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—ALA.: *Monroe Co.*, Claiborne upper bluff, Alabama R. (type). MISS.: *Hinds Co.*, Jackson. LA.: *Grant Par.*, Montgomery, Red R.

Type.—Probable holotype, No. 30519 ANSP, Moore, 1962, p. 51

Barbatia (Calloarca) cuculloid (Conrad) Dall in part

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia (Cucullaearca) cuculloid* (Conrad) "var."**

Arcidae

Arca lima Conrad "var." Aldrich, 1886, p. 57

Barbatia cuculloid Conrad var., Harris, 1897b, p. 47 in part, pl. 8, figs. 1, 1a; Harris, 1899b, p. 301, pl. 53, fig. 3; Sheldon, 1917, p. 14; Brann and Kent, 1960, p. 115

Range.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R.

Type.—Figured specimen (Harris 1897b), No. 141 PRI

Barbatia cuculloid (Conrad) var. Harris

See *Barbatia (Cucullaearca) ludoviciana* Harris

***Barbatia deusseni* Gardner**

Arcidae

Arca rhomboidella Lea, Harris, 1919, p. 51 in part. Not Lea, 1833, p. 74

Barbatia deusseni Gardner, 1927, p. 365, figs. 20, 21

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, 1 mi. below Collins sic [Colliers] Ferry, Brazos R. (type)

Type.—Holotype, No. 369244 USNM

Barbatia sp. cf. *domingensis* (Lamarck), Gardner, 1945

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia inglisia* Richards**

Arcidae

Barbatia ? *inglisia* Richards in Richards and Palmer, 1953, p. 44, pl. 9, fig. 2 hinge not available

Range.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

Locality.—FLA.: *Levy Co.*, 2.9 mi. S. of Gulf Hammock (type)

Type.—Holotype, No. I-7550 Fla. Geol. Sur.

Barbatia jacksonensis Cooke

See *Barbatia (Acar) aspera* (Conrad)

***Barbatia lignitifera* Aldrich**

Arcidae

Arca (Barbatia) lignitifera Aldrich, 1908b, p. 75, pl. 5, figs. 6, 7

Arca lignitifera Aldrich, Sheldon, 1917, p. 23, pl. 5, figs. 3, 4

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

Locality.—ALA.: *Wilcox Co.*, 6 mi. E. of Thomasville (type)

Type.—Holotype, No. 639054 USNM

Barbatia (Cucullaearca) ludoviciana (Harris)**Arcidae**

Barbatia cuculloidess (Conrad) var. Harris, 1899b, p. 301 in part, not pl. 53, fig. 3

Arca (cuculloidess?) ludoviciana Harris, 1919, p. 54, pl. 22, figs. 8-16 as *Byssosarca*, p. 223; Brann and Kent, 1960, pp. 146, 147 as *Byssosarca*

Arca (Barbatia) cuculloidess ludoviciana Harris, Barry, 1942+, p. 49, pl. 2, fig. 14

Barbatia ludoviciana (Harris), Gardner, 1945, p. 53 as cf.; Harris and Palmer, 1946, p. 46, pl. 11, figs. 6-8; Brann and Kent, 1960, p. 116

Barbatia (Cucullaearca) ludoviciana (Harris), Stenzel, Krause, and Twining, 1957 p. 58

Range.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr. Middle Eocene. Cook Mt. fm., upper Claiborne gr. Upper Eocene. Lower Jackson gr. *vide* Harris, 1946

Localities.—TEXAS: *Sabine Co.*, right bank Sabine R., Pendleton (type). For remainder of localities in Harris, 1919, p. 54 see *Barbatia (cucullaearca)* spp. LA.: *Bossier Par.*, Roberta. See Barry, 1942+, p. 50 for further La. localities

Types.—Lectotype, No. 561 PRI (Harris and Palmer, 1946, p. 46); paratypes, Nos. 560, 562-568 PRI

Barbatia palmerae Richards**Arcidae**

Barbatia palmerae Richards in Richards and Palmer, 1953, p. 44, pl. 9, fig. 1 hinge not available

Range.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

Locality.—FLA.: *Levy Co.*, 2.9 mi. S. of Gulf Hammock (type)

Type.—Holotype, No. I-7551 Fla. Geol. Sur.

Barbatia (Acar) reticulata (Gmelin)

See *Barbatia (Acar) aspera* (Conrad)

Barbatia (Plagiarca) rhomboidella (Lea)**Arcidae**

Arca rhomboidella Lea, 1833, p. 74, pl. 2, fig. 52; Conrad, App. in Morton, 1834, p. 6; Bronn, 1848a, p. 98; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 391; Aldrich, 1886, p. 9; de Gregorio, 1890, p. 196, pl. 24, fig. 28, copy Lea, not Meyer; Cossmann, 1893, p. 17 in part; Harris, 1895b, p. 39; Harris, 1919, p. 51 in part, pl. 21, figs. 11-14; pl. 22, fig. 1; Brann and Kent, 1960, p. 74

Anomalocardia rhomboidella (Lea), Conrad, 1865a, p. 11; Conrad, 1866a, p. 4

Arca (Cucullaearca) cuculloidess Conrad, de Gregorio, 1890, p. 195 in part, pl. 24, figs 17-20

Arca (Scapharca) rhomboidella Lea, Dall, 1898b, p. 625; Sheldon, 1917, p. 30, pl. 7, figs. 6-10; Brann and Kent, 1960, pp. 74, 75

Barbatia (Plagiarca) rhomboidella (Lea), Reinhart, 1935, p. 30

Barbatia (Scapharca ?) rhomboidella (Lea), Harris and Palmer, 1946, p. 44, pl. 11, fig. 14; Brann and Kent, 1960, p. 116

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, sand (type) and base, Alabama R.; Lisbon Bluff, Alabama R. MISS.: Newton Co., Newton; Clarke Co., Wautubbee. TEXAS: Lee Co. S.C.: Orangeburg Co., Orangeburg. LA.: Winn Par., St. Maurice; Bienville Par., Hammetts Branch; Sabine Par., 3 mi. NE. of Negreet. VA.: "Eocene of Virginia" Haldeman *vide* Dall, 1898b, p. 625 a museum label, never confirmed
Type.—Holotype, No. 5306 ANSP

Barbatia (Plagiarca) cf. rhomboidella (Lea) "var." **Arcidae**
Arca cf. rhomboidella Lea var. Harris, 1951, p. 14, pl. 6, fig. 8; Brann and Kent, 1960, p. 75

Range.—Upper Eocene. "Ocala ls.", Ocala gr.
Locality.—FLA.: Marion Co., Old Camp Quarry, Florida Lime Products Co., about 2.2 mi. from Ocala
Type.—Figured specimen, No. 24467 PRI

Barbatia (Plagiarca) rhomboidella parsaba (Harris) **Arcidae**
Arca rhomboidella parsaba Harris, 1919, p. 53, pl. 22, figs. 2-4; Brann and Kent, 1960, p. 75

Range.—Middle Eocene. Claiborne gr. (type)
Locality.—TEXAS: Sabine Co., Sabine R. (see Veatch Survey, 1902, p. 129) (type)
Types.—Syntypes, Nos. 554-556 PRI

Barbatia (Plagiarca) rhomboidella subscopula (Harris) **Arcidae**
Arca rhomboidella subscopula Harris, 1919, p. 52, pl. 21, figs. 15-17; Brann and Kent, 1960, p. 75

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.
Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)
Types.—Syntypes, Nos. 551, 552 PRI

Barbatia (Jacksonarca) seraperta Harris **Arcidae**
Barbatia (Jacksonarca) seraperta Harris in Harris and Palmer, 1946, p. 46, pl. 11, figs. 4, 5, 5a; Brann and Kent, 1960, p. 116

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.
Locality.—MISS.: Hinds Co., cut on the G.M. and M.R.R. just beyond N. limit of freightyard, Jackson (type)
Type.—Holotype, No. 4194 PRI

Barbatia (Barbatia) uxorispalmeri Stenzel and Krause **Arcidae**
Cibota mississippiensis (Conrad), Gabb, 1860d, p. 387, pl. 67, fig. 58.
 Not *Byssarca mississippiensis* Conrad, 1848b, p. 125
Arca ludoviciana Harris, Deussen, 1924, p. 67. Not *A. ludoviciana* Harris, 1919, p. 54
Arca (Barbatia) cuculoides Conrad "var.", Renick and Stenzel, 1931, p. 104
Barbatia (Barbatia) uxorispalmeri Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 58, pl. 5, figs. 5-10

Range.—Middle Eocene. Viesca mem., Weches fm., middle Claiborne gr.; Stone City beds (type), middle Claiborne gr.; Wheelock mem., Cook Mt. fm., upper Claiborne gr. (Stenzel, Krause, and Twining)

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20708 BEG; paratypes, No. 20699 (figs. 7, 8), No. 20700 (figs. 9, 10) BEG

***Barbatia (Plagiarca) vughani* Casey**

Arcidae

Arca rhomboidella Lea, var. Vaughan, 1896, p. 37, pl. 3, fig. 8

Arca vughani Casey, 1903, p. 265; Veatch, 1906, pl. 19, fig. 3, copy Vaughan; Deussen, 1914, pl. 5, fig. 3; Harris, 1919, p. 53, pl. 22, figs. 5-7; Brann and Kent, 1960, p. 81

Arca (Scapharca) vughani Casey, Sheldon, 1917, p. 31, pl. 7, fig. 11;

Brann and Kent, 1960, p. 81

Anadara sp. cf. *A. vughani* (Casey), Gardner, 1945, p. 55

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: *Winn Par.*, St. Maurice (type). TEXAS: *Sabine Co.*, Sabine R.

Type.—Holotype, No. 480107 USNM

***Barbatia (Cucullaearca)* sp.**

Arcidae

Arca sp. Harbison, 1944, p. 3, pl. 2, fig. 2

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

Locality.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

Type.—Figured specimen, ANSP

***Barbatia (Cucullaearca)* spp.**

Arcidae

Arca (cuculloidess?) ludoviciana new var. Harris, 1919, p. 54 in part Specimens from localities in Harris, 1919, p. 54 other than "Sabine R." (= *B. ludoviciana* Harris). Middle Eocene

Barnea alatoidea (Aldrich)

See *Pholas alatoidea* Aldrich

***Basterotia prima* Aldrich**

Sportellidae

Basterotia ? prima Aldrich, 1921, p. 20, pl. 3, figs. 1-3

Range.—Lower Eocene. Bells Ldg. mem., Tuscahoma fm.; Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

Types.—Syntypes, No. 59 GSATC

Bathytormus Stewart (Crassatellidae)

See also *Crassatella*

***Bathytormus alaeformis* (Conrad)**

Crassatellidae

Crassatella alaeformis Conrad, 1830, p. 228, pl. 10, fig. 1; Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 396, pl. 3, fig. 2 (not fig. 3 as in text and expl. of pl.); H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 383; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Clark, 1895, p. 5; Clark, 1896, p. 81, pl. 27, figs. 1a-k; Vokes, 1961, p. 50, pl. 10, figs. 5, 6

Crassatella capri-cranium Rogers and Rogers, 1839b, p. 375, pl. 30, fig. 2 (2 figures) (reprint 1884, p. 672, pl. 5, fig. 2, 2 figures); H. C. Lea, 1849, p. 98; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5 as *capricranium*

(?) *Crassatella palmula* Conrad, 1846c, p. 396, pl. 4, fig. 1; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 383; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Clark, 1896, p. 93

Crassatella declivis Heilprin, 1880, p. 151, pl. facing p. 150, fig. 9; Aldrich, 1897a, p. 4, pl. 3, figs. 1, 1a

Crassatella protexta Conrad, de Gregorio, 1890, p. 198, pl. 25, fig. 12 copy Conrad, 1846c *C. alaeformis*

Crassatellites alaeformis (Conrad), Clark and Martin, 1901, p. 180, pl. 41, figs. 1-8; Dall, 1903a, p. 1469

Crassatellites palmulus (Conrad), Dall, 1903a, p. 1469

Range.—Paleocene. Aquia fm. (type).

Localities.—MD.: "Maryland" (type). *Charles Co.*, 1 mi. SE. of Mason Springs; Glymont; Clifton Beach; Mattawoman Creek; Liverpool Point; Wades Bay; *Prince Georges Co.*, 1 mi. NE. of Piscataway Cr.; Brooks Estate near Seat Pleasant; Fort Washington; Upper Marlboro [Conrad—*C. pamula*]; 3 mi. W. of Leeland on Western Branch; W. of Collington between Buena Vista and Collington; *Anne Arundel Co.*, Sheckel's Farm near South River; *Queen Annes Co.*, Rolphs Landing, Chester R. VA.; *Stafford Co.*, Potomac Cr.; Aquia Cr.; *King George Co.*, 2 mi. below Potomac Cr.; Paspotansa Cr.; *W. Hanover Co.*, Ratcliff Wharf; Rappahannock R. "S. CAR.": [Conrad, 1866a, p. 5]

Types.—Possible holotype, No. 30498 ANSP Moore, 1962, p. 35. Holotype *Crassatella declivis* Heilprin, No. 2490 USNM. Holotype *Crassatella palmula* Conrad, No. 30580 ANSP Moore, 1962, p. 82

Bathytormus clarkensis (Dall)

Crassatellidae

Crassatellites clarkensis Dall, 1900, p. 1192, pl. 36, figs. 20, 21, 24, 25; Dall, 1903a, p. 1470; Schuchert, *et al.*, 1905, p. 175; Harris, 1919, p. 100, pl. 34, figs. 5, 6; Gardner, 1945, p. 92, pl. 6, figs. 5, 13, 15, 16; Brann and Kent, 1960, p. 284

Crassatella clarkensis (Dall), Harris and Palmer, 1946, pp. 81, 82, pl. 18, figs. 30, 31; Brann and Kent, 1960, p. 279; Kent in Brann and Kent, 1960, p. 986, pl. 1, figs. 1, 2

Bathytormus clarkensis (Dall), Stewart, 1930, p. 138

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Laredo fm. (Gardner, p. 92), upper Claiborne gr.; (Jackson Eocene, Mississippi Embayment area, Harris in Harris and Palmer, 1946)

Localities.—LA.: *Lincoln Par.*, Chautauqua; *Sabine Par.*, 3 mi. SE. of Negreet; *Winn Par.*, St. Maurice; Cooper's well-depth 1000 ft.; Winnfield, near Saline Bayou. MISS.: *Clarke Co.*, 8 mi. W. of Enterprise; Wautubbee (type); *Newton Co.*, 2½ mi. E. of Newton. ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R.; Lisbon Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 mi. WNW. of Orangeburg. NE. MEXICO (Gardner, p. 92)

Types.—Syntypes, No. 139086 USNM

Bathytormus clarkensis ferrocarolinus (Harris)**Crassatellidae**

Crassatellites clarkensis ferrocarolinus Harris, 1919, pp. 100, 101, pl. 34, figs. 7-10; Brann and Kent, 1960, pp. 284, 285

Crassatella clarkensis ferrocarolina (Harris), Harris and Palmer, 1946, p. 82 (reference to)

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Orangeburg Co., 3 mi. WNW. Orangeburg (type)

Types.—Syntypes, Nos. 711-714 PRI

Bathytormus clarkensis ludovicianus (Kent)**Crassatellidae**

Crassatellites clarkensis ludovicianus Harris, 1919, p. 101 *nomen nudum*; Gardner, 1945, p. 92

Crassatella clarkensis ludoviciana Kent, Brann and Kent, 1960, p. 279; Kent in Brann and Kent, 1960, p. 986, pl. 1, figs. 3-8

Range.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Clarke Co., 8 mi. W. of Enterprise. LA.:

Winn Par., St. Maurice; Ouachita Par., Lapiniere Ldg., Ouachita R. (holotype)

Types.—Holotype, No. 2466; paratypes, Nos. 2463-2465 PRI

Bathytormus clarkensis postclarkensis (Harris)**Crassatellidae**

Crassatellites flexurus postclarkensis Harris, 1919, pp. 100, 103 *nomen nudum*

Crassatella flexura postclarkensis (Harris), Harris and Palmer, 1946, p. 82, pl. 19, figs. 3, 4

Crassatella flexura Conrad "var", Brann and Kent, 1960, p. 280 indicated as hypotypes.

This subspecies has never received a full description. It was figured in 1946 with an accompanied comparison with the species. The figured specimens are herein designated lectotype and paralectotype respectively.

Range.—Upper Eocene. White Bluff fm., lower Jackson gr.; Tullos mem. (type), Yazoo clay, upper Jackson gr.

Localities.—LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R. (type), ARK.: Cleveland Co., Vince Ferry, Saline R. (Harris in Harris and Palmer, 1946, p. 82), MISS.: Clarke Co., Garland Cr. (paratype)

Types.—Lectotype, No. 4315; paralectotype, No. 4316 PRI

Bathytormus flexurus (Conrad)**Crassatellidae**

Crassatella flexura Conrad in Wailes, 1854, p. 289, pl. 14, fig. 7 (reprint, 1939, p. 19, pl. 1, fig. 7); Conrad, 1856a, p. 259 (reprint, 1939, p. 5); Conrad, 1865a, p. 10; Conrad, 1866a, p. 23; Hilgard in Hopkins, 1871, p. 11; Harris and Palmer, 1946, p. 81, pl. 18, figs. 22-28, 35, 37, fig. 38 var.; pl. 19, fig. 1 same as pl. 18, fig. 38, fig. 2 var.; Brann and Kent, 1960, pp. 279, 280

Crassatellites flexurus (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 100

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: Hinds Co., Jackson (type); Town Cr., Jackson. LA.: Grant Par., Montgomery Ldg., Red R. TEXAS: Sabine Co., Robinsons Ferry ?, Sabine R.

Types.—Probable syntypes (2), No. 13187 ANSP. Specimens broken *vide* Moore, 1962, p. 61

Bathytormus flexurus productus (Conrad)**Crassatellidae**

Crassatella producta Conrad, 1863a, p. 289; Conrad, 1865a, p. 10; Conrad, 1865b, p. 139, pl. 10, fig. 6 [not Enterprise, Miss.]; Conrad, 1866a, p. 23; not Aldrich, 1886, p. 50; Harris, 1897b, p. 58

Crassatellites productus (Conrad), Dall, 1903a, p. 1469

Crassatellites flexurus productus (Conrad), Harris, 1919, p. 100

Crassatella flexura producta Conrad, Harris and Palmer, 1946, p. 81, pl. 18, figs. 29, 36; Brann and Kent, 1960, p. 280

Range.—Upper Eocene. Lower Jackson gr. (type)

Locality.—MISS.: *Clarke Co.*, "Enterprise" error for Garland Cr. (type) [see Aldrich, 1885c, p. 307]

Type.—Probable holotype, No. 13224 ANSP Moore 1962, p. 89

Bathytormus protextus (Conrad)**Crassatellidae**

Crassatella protexta Conrad, 1832b, p. 22, pl. 8, fig. 2; (Harris reprint, 1893, p. 40, pl. 8, fig. 2); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 395, pl. 2, fig. 7, not pl. 3, fig. 2 as in text; pl. 3, figs. 4 (2) immature; H. C. Lea, 1849, p. 98; Bronn, 1848a, p. 344; d'Orbigny, 1850, p. 383; Tuomey, 1858, pp. 265, 273, not p. 271; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; de Gregorio, 1890, p. 198, pl. 24, figs. 31-37; pl. 25, figs. 2-11; figs. 13, 14 ? copy Conrad, 1832b, fig. 15, not fig. 12; Cossmann, 1893, p. 13; Harris, 1895b, p. 37; Harris and Palmer, 1946, p. 82, pl. 18, figs. 32-34; Brann and Kent, 1960, pp. 281, 282

Crassatellites protextus (Conrad), Dall, 1903a, p. 1469; Harris, 1919, pp. 100-103, pl. 35, figs. 1-5; Brann and Kent, 1960, p. 286

Bathytormus protextus (Conrad), Stewart, 1930, pp. 37, 137

Crassatellites alaeformis Conrad var., Aldrich, 1931, p. 6, pl. 6, fig. 5, young of *B. protexta* (Conrad)

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Types.—Possible syntypes, (3) No. 30520; possible syntypes No. 30511 ANSP. One specimen marked with "X", presumably indicating type. Moore, 1962, p. 90. Figured specimen *Crassatellites alaeformis* Conrad var., Aldrich, 1931, GSATC

Bathytormus protextus sinus (Harris)**Crassatellidae**

Crassatella protexta sinus Harris, 1951, p. 18, pl. 8, figs. 3, 4; Brann and Kent, 1960, p. 282

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—GA.: *Houston Co.*, Georgia Lime Rock Co., 3.9 mi. from Perry. FLA.: *Marion Co.*, just below office and plant Dixie Lime Products Co., Zuber (type localities)

Types.—Syntypes, Nos. 24481, 24482 PRI

Biocorbula pearlensis (Meyer)**Corbulidae**

Corbula pearlensis Meyer, 1886b, p. 83, pl. 3, figs. 16, 16a

Corbula ? pearlensis Meyer, Cossmann, 1893, p. 7

Corbula ? pearlensis Meyer, Dall, 1898b, p. 846

Corbula (Biocorbula) pearlensis Meyer, Harris and Palmer, 1946, p. 117, pl. 25, figs. 1, 2; Brann and Kent, 1960, p. 268

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Town Creek, Jackson (type)

Type.—Holotype, No. 638853 USNM

Cf. *Blagroveia gunteri* Richards**Veneridae**

Blagroveia gunteri Richards in Richards and Palmer, 1953, p. 54, pl. 12, figs. 6, 7 (?)

Range.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm. (type.) lower Ocala gr.

Localities.—FLA.: *Levy Co.*, road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock just SW. of State Road 55 SW. $\frac{1}{4}$ sec. 34, T. 14 S., R. 16 E. (type); New Lebanon dolomite pit SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 12, T. 16 S., R. 16 E.; *Citrus Co.*, Dunnellon Phosphate Mining Co., SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10, T. 18 S., R. 19 E.

Types.—Holotype, No. I-7579; paratypes (?), No. I-7580 Fla. Geol. Sur.

Bornia dalli (Cossmann)

See cf. *Mysella dalli* (Cossmann)

Bornia isosceles* Harris*Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Bornia prima (Aldrich), Vaughan in Veatch and Stephenson, 1911, p. 240; Cooke, 1918, p. 51 not *Kellia prima* Aldrich, 1897a, p. 15

Bornia isosceles Harris, 1919, p. 109, pl. 37, figs. 13, 13a

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—GA.: *Richmond Co.*, Sloan's Scarp on McBean Cr., between McBean Station and Savannah R. (type)

Types.—Syntypes, No. 559281 USNM (Harris, 1919, pl. 37, fig. 13a)

Bornia perdita* Harris*Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Bornia perdita Harris, 1919, p. 109, pl. 37, figs. 14, 14a; Brann and Kent, 1960, p. 126

Range.—Middle Eocene. Probably Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: "Sabine River?" [Veatch Survey, 1902, p. 129] (type)

Type.—Holotype, No. 725 PRI

Bornia plectopygia* Dall*Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Bornia plectopygia Dall, 1900, p. 1149; 1903a, pl. 49, fig. 9; Schuchert, et al., 1905, p. 103; Harris, 1919, p. 108, pl. 37, fig. 11 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 108493 USNM

Bornia prima* (Aldrich)*Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Kellia prima Aldrich, 1897a, p. 15, pl. 5, figs. 3, 3a; Harris, 1899b, p. 320, pl. 53, fig. 11 copy Aldrich; Deussen, 1924, p. 49, pl. 15, figs. 7, 7a

"*Kellia*" *prima* Aldrich, Harris, 1897b, p. 58, pl. 11, figs. 6, 6a copies Aldrich; Dall, 1899, p. 883

Bornia prima (Aldrich), Dall, 1899, p. 883; Dall, 1900, p. 1149; Barry, 1942+, p. 66; not *B. prima* (Aldrich), Vaughan in Veatch and Stephenson, 1911, p. 240. See *B. isosceles* Harris

Range.—Lower Eocene, Sabinetown fm., upper Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Choctaw Corner (type); Woods Bluff, Tombigbee R. (Dall). TEXAS: Sabine Co., Sabinetown $\frac{1}{4}$ mi. down stream from Sabinetown Ferry Ldg., Sabine R.

Type.—Holotype, No. 638999 USNM

Bornia prima (Aldrich), Vaughan in Veatch and Stephenson
See *B. isosceles* Harris

***Bornia scintillata* Dall Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Bornia scintillata Dall, 1900, p. 1149; 1903a, pl. 49, fig. 10; Schuchert, et al., 1905, p. 103; Harris, 1919, p. 107, pl. 37, fig. 10 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 108492 USNM

***Bornia zapataensis* Gardner Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Bornia zapataensis Gardner, 1927, p. 374, fig. 9; Trowbridge, 1932, pl. 41, fig. 1 copy Gardner type

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: Zapata Co., 3 mi. SE. of Zapata (type)

Type.—Holotype, No. 369237 USNM

***Brachidontes alabamensis* (Aldrich) Mytilidae**

Modiola alabamensis Aldrich, 1895b, p. 16, pl. 5, fig. 13; Harris, 1897b, p. 47, pl. 7, fig. 9; Harris, 1899b, p. 300, pl. 53, fig. 2 Texas, specimens lost; Brann and Kent, 1960, p. 563

Modiolus (*Brachydontes* [sic]) *alabamensis* (Aldrich), Dall, 1898b, p. 796 Not *Modiolus alabamensis* (Aldrich), Clark and Martin, 1901, p. 185, pl. 43, figs. 4, 5, 5a=*B. potomacensis* (Clark)

Modiolus (*Brachydontes* [sic]) *alabamensis* (Aldrich), Barry, 1942+, p. 57, pl. 3, fig. 6; pl. 5, fig. 4; Wasem and Wilbert, 1943, p. 192

Volsella alabamensis (Aldrich), Shimer and Shrock, 1944, p. 413, not pl. 164, fig. 17 copy Clark and Martin=*B. potomacensis* (Clark)

Musculus alabamensis (Aldrich), Gardner, 1945, p. 57. Not Harris as in Gardner

Range.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr., Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Choctaw Corner (type). LA.: Sabine Par., about $\frac{1}{4}$ mi. upstream from bridge over Sabine R. on La. Highway 6, R. S. Hendricks farm in center of S. $\frac{1}{2}$ sec. 31, T. 7 N., R. 11 W. TEXAS: Sabine Co., Pendleton, Sabine R. [fide Harris, 1899b, p. 300]

Type.—Holotype, No. 638959 USNM

***Brachidontes potomacensis* (Clark) Mytilidae**

Modiola potomacensis Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 1 a-c

Modiolus (Brachydontes [sic]) potomacensis (Clark), Dall, 1898b, p. 796

Modiolus alabamensis (Aldrich), Clark and Martin, 1901, p. 185, pl. 43, fig. 4; figs. 5, 5a copy Clark *M. potomacensis*. Not *M. alabamensis* (Aldrich), 1895b, p. 16

Volsella alabamensis (Aldrich), Shimer and Shrock, 1944, p. 413, pl. 164, fig. 17 copy Clark and Martin

Range.—Paleocene. Aquia fm. (Clark and Martin). Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., Popes Cr.; 2 mi. above Popes Cr.; Wades Bay; Liverpool Point; Clifton Beach; 1 mi. SE. of Mason Springs; Glymont; Prince Georges Co., Upper Marlboro; Fort Washington. VA.: Stafford Co., Potomac Cr. (type); Aquia Cr.; King George Co., Woodstock; mouth of Paspotansa; 2 mi. below Potomac Cr.

Types.—Syntypes, USNM

Syntypes have been reasoned to be from Potomac Cr., Va., because the explanation of the original figures (1896, pl. 34, figs. 1 a-b) did not designate the locality, but in 1901, Clark and Martin refigured the species (under *M. alabamensis* Aldrich) using the initial illustrations with Potomac Cr. as the locality. They added a figure of a specimen from Paspotansa Cr. but that was an afterthought.

Cf. *Brachidontes saffordi* (Gabb)

Mytilidae

Modiola saffordi Gabb, 1860d, p. 395, pl. 68, fig. 30; Safford, 1869, p. 419; Harris, 1896, p. 49, pl. 3, figs. 4, 5; Brann and Kent, 1960, p. 563

Modiolus (Brachydontes [sic]) saffordi (Gabb), Dall, 1898b, p. 796; Gardner, 1935, p. 146, pl. 8, figs. 8, 9

Volsella saffordi (Gabb), Shimer and Shrock, 1944, p. 413, pl. 164, fig. 18 copy Harris

Hinge not known

Range.—Paleocene. "Ripley Group" (type) = [Not Cretaceous] Kincaid fm., lower Midway gr.

Localities.—TENN.: Hardeman Co. (type), Hannah's, 1¼ mi. N. of Crainsville (Harris). TEXAS: See Gardner, 1935.

Type.—Lost ? [*fide* Harris, 1896, p. 50] ["lost" *fide* Gardner, 1935, p. 146]

Brachidontes stubbsi (Harris)

Mytilidae

Modiola stubbsi Harris, 1899b, p. 298, pl. 52, figs. 5-6 specimen lost

Modiolus (Brachydontes [sic]) stubbsi (Harris), Barry, 1942+, p. 56, pl. 6, fig. 3; Wasem and Wilbert, 1943, p. 192

Range.—Lower Eocene. Marthaville fm. (type), lower Wilcox [Sabine] gr.

Localities.—LA.: Sabine Par., Raines place about 6 mi. WSW. of Marthaville (type); road cut along La. Highway 42-D in SW. ¼ SE. ¼ SW. ¼ sec. 25, T. 8 N., R. 12 W. *Natchitoches Par.*, field adjacent to La. Highway 607 in NW. ¼ SW. ¼ NE. ¼ sec. 29, T. 9 N., R. 10W.

Type.—Holotype lost. (Harris coll.)

Brachidontes texanus (Harris)**Mytilidae**

Modiola texana Harris, 1894b, p. 180 listed *nomen nudum*
Modiola texana "Gabb", Harris, 1895a, p. 46 in part, pl. 1, fig. 2;
 Schuchert, et al., 1905, p. 407; Stenzel, Krause, and Twining, 1957,
 p. 39 in part. Not *Perna texana* Gabb, 1862c, p. 371
Modiolus (Brachidontes) texanus "Gabb", Dall, 1898b, p. 796 in part
Modiolus texanus (Gabb), Harris, 1919, p. 32 in part, not of Gabb, pl.
 17, figs. 6, 7 types, not fig. 8 = *M. sp.*, not Trowbridge, 1932, pl.
 43, fig. 3

This is not the "*Perna texana* of Gabb". Because the original generic name was not given as *Modiola* the specific name may stand with Harris as author.

Harris in 1894b, (Arkansas Geol. Sur.) reviewed in the last part of the Bulletin, the Claiborne and Jackson Eocene stages of Louisiana. On pages 178-180 he gave sections in Bossier Parish. In a reddish sandstone (Pope Joy Cut) and at locality "23 N., 12 W. section 19, south-east quarter, (Station 2416 of Museum [USNM] register)", he identified *Modiola texana*. He believed the species to be what Gabb named "*Perna texana*" from Caddo Peak, Texas (see Stenzel, Krause, and Twining, 1957, p. 39). Harris in 1895a included the forms under *Modiola texana* (Gabb) but figured the specimen in the USNM from "Red Land, La.", Bossier Parish, capitalizing the names as of a place. In 1899, Harris and Veatch described the "Red land area" of Bossier Parish of Louisiana referring to the previous description in the Arkansas bulletin (1894b, p. 180). There is no doubt that the name of "Red Land" of Harris, 1895a and 1919 is the red land area. By typographical slips "23 N" became "sp. 23, N" in 1919.

This species has never had a description. Its indication has been to a wrongly identified form. It has been illustrated, has a "type" locality, and the "type" is in existence. It is worthy of description. The name is not preoccupied by that of Gabb because the original of Gabb was "*Perna texana*". If both species belong in the same genus Gabb's name has priority.

Range.—Middle Eocene. Claiborne gr. ("type")

Localities.—LA.: Bossier Par., "near Red Land" ("type") USNM "Sect. 19, R. 12 W.; sp. 23 N." [sic] (Harris, 1919). Harris, 1894b, p. 86, "23 N., 12 W., sec. 19, SE. 1/4". "Redland area. . . ." Harris and Veatch, 1899, pp. 47, 86. Cf. LA.: Caddo Par., Vivian; Webster Par., 7 mi. N. of Plain Dealing. Cf. TEXAS: Atacosa Co., Frio Co., 2 mi. E. of Arnold's Ranch

Type.—"Holotype", No. 154872 USNM ("Pleistotype" becomes "holotype")

Brachidontes sp.**Mytilidae**

Modiolus texanus (Gabb), Trowbridge, 1932, pl. 43, fig. 3. Not "*Perna texanus*" Gabb, 1862c; not Harris, 1895a and 1919

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS; Zapata Co., 4.8 mi. SE. of Zapata

Type.—Figured specimen, No. 371785 USNM

Breviarca stearnsii Gardner

See *Striarca stearnsii* (Gardner)

Bucardia veta Conrad

See ? *Glossus veta* (Conrad)

Byssosarca cuculoides ConradSee *Barbatia cuculoides* (Conrad)*Byssosarca (cuculoides ?) var. ludoviciana* HarrisSee *Barbatia (Cucullaearca) ludoviciana* (Harris)*Byssosarca lima* ConradSee *Barbatia cuculoides* (Conrad)*Byssomia petricoloides* LeaSee ? *Lithophaga petricoloides* (Lea)**Caestocorbula fossata** (Meyer and Aldrich)**Corbulidae***Corbula Murchisoni* var. *fossata* Meyer and Aldrich, 1886, p. 45, pl. 2, fig. 22*Corbula (Aloidis) fossata* [Meyer and] Aldrich, Dall, 1898b, p. 844*Corbula murchisoni* var. *fossata* Meyer and Aldrich, Harris, 1919, p. 193, pl. 58, figs. 11, 16-20; Brann and Kent, 1960, pp. 266, 267 [not var.]"Corbula" *fossata* Aldrich, Vokes, 1944, p. 621 probably *Caestocorbula**Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr., occasionally Gosport sd., uppermost Claiborne gr.*Localities*.—LA.: *Bienville Par.*, Mt. Lebanon. MISS.: *Newton Co.*, Newton (type); Hickory; *Clarke Co.*, Wautubbee; 8 mi. W. of Enterprise. [?] *Co.* Johnson's place, location unknown. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Harris); Lisbon Bluff, Alabama R.*Type*.—Holotype, No. 638748 USNM**Cf. Caestocorbula murchisonii** (Lea)**Corbulidae***Corbula oniscus* Conrad, 1833a, p. 341; Conrad, 1835a, (Harris reprint, 1893, p. 115, pl. 19, fig. 3); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 219; Conrad, 1846c, p. 398 in part, not pl. 4, fig. 3 = *C. gibbosa*; H. C. Lea, 1849, p. 98 in part; d'Orbigny 1850, p. 382 in part, not Conrad, "p. 542"; Tuomey, 1858, pp. 265, 273 in part; Conrad, 1865a, p. 3 in part; Conrad, 1866a, p. 8 in part, Heilprin, 1884b, p. 89; Harris, 1895b, p. 31 in part; Dall, 1898b, p. 843 in part; Clark and Martin, 1901, p. 164 in part, not pl. 32, figs. 7, 7a, 8, 8a, 8b; not Shimer and Shrock, 1944, p. 431, pl. 172, figs. 10, 11 copies Clark and Martin*Corbula Murchisonii* Lea, 1833, p. 46, pl. 1, fig. 13; Conrad in Morton, 1834, p. 8 = "*C. nasuta*" Conrad; H. C. Lea, 1849, p. 98 (as *Murchisoniana*); de Gregorio, 1890, p. 231, pl. 37, fig. 22 copy Lea; figs. 23, 24 copies *C. oniscus* Conrad; figs. 25-39; pl. 38, figs. 1-13; Cossman, 1893, p. 6; Harris 1895b, p. 29; Harris, 1919, p. 191, pl. 58, figs. 7-10, 12-15; Harris and Palmer, 1946, p. 114, pl. 24, figs. 2, 6; Brann and Kent, 1960, p. 266.Not *Corbula oniscus* Conr., var. *C. gibbosa* Lea, Heilprin, 1881, p. 364

The name *Corbula oniscus* Conrad, 1833, Jan. has priority over *C. murchisonii* Lea, 1833, December. Conrad mixed the identification of his *C. oniscus* so badly between *C. gibbosa* Lea and *C. murchisonii* that we agree with Harris, 1919 the less confusing settlement is to use Lea's name, *C. murchisonii*.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, Nos. 5061, 5062 ANSP. *C. oniscus* Conrad probably syntypes (12), No. 20347 ANSP Moore, 1962, p. 81

Caestocorbula wailesiana (Harris in Dall)

Corbulidae

Corbula bicarinata Conrad in Wailes, 1854, p. 289, pl. 14, fig. 3 (reprint, 1939, p. 19, pl. 1, fig. 3); Conrad, 1856a, p. 253 (reprint, 1939, p. 4); Conrad, 1865a, p. 3; Conrad, 1866a, p. 24; Meyer, 1885a, p. 462. Not *C. bicarinata* G. B. Sowerby I, 1833b, p. 35

Corbula (Aloidis) wailesiana Harris ms in Dall, 1898b, p. 846, new name for *C. bicarinata* Conrad; Harris and Palmer, 1946, p. 113, pl. 23, figs. 27, 28; pl. 24, figs. 1, 3, 4, 5, 7, 8; Brann and Kent, 1960, pp. 274, 275

Corbula wailesiana Harris (ms) Dall, Harris, 1919, pp. 189, 192, pl. 57, figs. 22, 23; Brann and Kent, 1960, p. 274

"*Corbula*" *wailesiana* Harris, Vokes, 1944, p. 621 probably *Caestocorbula*

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: Hinds Co., Jackson (type). ARK.: Cleveland Co., Vince Bluff, Saline R. (small specimens, Harris). LA.: Grant Par., Montgomery, Red R. See Harris and Palmer for further discussion of localities

Types.—*Corbula bicarinata* Conrad, syntypes (5), No. 13188 ANSP Moore, 1962, p. 42

Callista (Costacallista) aequorea (Conrad)

Veneridae

Cytherea aequorea Conrad, 1833b, p. 36, not pl. 19, fig. 3 as in text (Harris reprint, 1893, p. 58, pl. 20, fig. 5); Conrad, App. in Morton, 1834, p. 7; Conrad, 1842b, p. 175; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265; Smith, 1885, p. 274; Aldrich, 1885c, p. 306; Langdon, 1886, p. 208; de Gregorio, 1890, p. 216 in part; Harris, 1895b, p. 2

Cytherea Hydi Lea, 1833, p. 66, pl. 2, fig. 42; Conrad, App. in Morton, 1834, p. 7=*C. aequorea* Conrad; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380=*C. aequorea*; Harris, 1895b, p. 22=*C. aequorea* Conrad

Meretrix aequorea (Conrad), Conrad, 1854, p. 29; Conrad, 1856a, p. 257 (reprint, 1939, p. 3); Cossmann, 1893, p. 9; Harris, 1919, p. 140, pl. 44; figs. 3-6; Brann and Kent, 1960, p. 543

Dione aequorea (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Cytherea aequorea Mut. *cominduta* de Gregorio, 1890, pp. 216, 217, pl. 34, figs. 5-10

Cytherea aequorea Mut. *Hydi* Lea, de Gregorio, 1890, p. 216, pl. 33, fig. 7, copy Lea, figs. 8-15 [not fig. 18-15 as in Palmer]; Cossmann, 1893, p. 10

Callista (Costacallista) aequorea (Conrad), Palmer, 1927/1929, p. 89, pl. 15, figs. 3, 9, 14; Brann and Kent, 1960, p. 150

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, No. 20157 ANSP Moore, 1962, p. 35; syntypes (2) *C. aequorea* Mut. *cominduta* de Gregorio, No. 26450 PRI De Gregorio Coll.

Callista (Costacallista) aldrichi (Harris)**Veneridae**

Meretrix perovata var. *aldrichi* Harris, 1895b, p. 48, pl. 1, fig. 1; Harris, 1919, p. 138, pl. 43, fig. 17; pl. 44, figs. 1, 2, 2a; Brann and Kent, 1960, pp. 545, 546

Callista (Costacallista) perovata aldrichi (Harris), Palmer, 1927/1929, p. 87, pl. 15, figs. 7, 13; Brann and Kent, 1960, p. 153

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)
Type.—Holotype, No. 44 PRI [Not Texas State or Univ., Texas Mus. as in Harris, 1895; 1919]

Callista (Callista) annexa (Conrad)**Veneridae**

Dione annexa Conrad, 1865b, p. 137, pl. 10, fig. 5; Conrad, 1866a, p. 24

Meretrix annexa (Conrad), Harris, 1919, p. 138

Callista (Callista) annexa (Conrad), Palmer, 1927/1929, p. 75, pl. 14, figs. 17, 20; Harris and Palmer, 1946, p. 95, pl. 21, figs. 6-8; Brann and Kent, 1960, pp. 150, 151

Macrocallista annexa (Conrad), Richards and Palmer, 1953, p. 53, pl. 12, fig. 5

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type)

Localities.—MISS.: Clark Co., "Enterprise"—Garland Cr. see Aldrich, 1885c, p. 307 (type); Hinds Co., Jackson. LA.: Grant Par., Montgomery, Red R.; Caldwell Par., Gibson Ldg., Ouachita R.; Bunker Hill, Ouachita R.; Catahoula Par., Danville Ldg., Ouachita R. FLA.: Levy Co., New Lebanon dolomite pit, SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 12, T. 16 S., R. 16 E.; road metal pit 2.9 mi. S. of N. limits of Gulf Hammock, just SW. of State Road 55 in SW. $\frac{1}{4}$ sec. 34, T. 14 S., R. 16 E. (Richards and Palmer)

Type.—Missing, ANSP Moore, 1962, p. 38

Callista annexa pearlensis (Harris)

See *Callista (Costacallista) pearlensis* (Harris)

Callista (Costacallista) mortoni (Conrad)**Veneridae**

Cytherea Mortoni Conrad, 1834, p. 150; Conrad, 1835a (Harris reprint, 1893, p. 116, pl. 20, fig. 1); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Heilprin, 1879b, p. 222; de Gregorio, 1890, p. 220; Harris, 1895b, p. 29

Meretrix mortoni (Conrad), Conrad, 1854, p. 30; Harris, 1919, p. 139, pl. 43, figs. 15, 16 (not fig. 14 as in text = *M. perovata*); Brann and Kent, 1960, pp. 543, 544

Dione Mortoni (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Cytherea aequorea var. *Mortoni* Conrad, Cossmann, 1893, p. 10

Callista (Costacallista) mortoni (Conrad), Palmer, 1927/1929, p. 88, pl. 15, figs. 11, 19, 20; Stewart, 1930, p. 241; Brann and Kent, 1960, p. 152

Alloccardia mortoni (Conrad), Perrilliat Montoya, 1963, p. 12, pl. 2, fig. 2

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Thirteen specimens, one possibly figured, No. 20179 ANSP
Moore, 1962, p. 78

Callista (Callista) neusensis (Harris)

Veneridae

Meretrix neusensis Harris, 1919, p. 136, pl. 43, figs. 4-7, 10; Brann and Kent, 1960, p. 544

Callista (Callista) neusensis (Harris), Palmer, 1927/1929, p. 73, pl. 14, figs. 13, 14, 16

Range.—Trent fm.—age in determination. [? Miocene, formerly included in Eocene.]

Locality.—N.C.; Craven Co., Rocky Ldg. on the Neuse R., 16-17 mi. above Newbern, in 'Trent fm.' near Newbern (type)

Types.—Syntypes, 1154-1157, 1163 PRI

Callista (Costacallista) pearlensis (Harris)

Veneridae

Meretrix pearlensis Harris, 1897a, p. 470, pl. 18, figs. 4, 5

Callista (Costacallista) pearlensis (Harris), Palmer, 1927/1929, p. 87, pl. 15, figs. 10, 12, 15; Brann and Kent, 1960, p. 153

Callista annexa pearlensis (Harris), Harris and Palmer, 1946, pp. 95, 96, pl. 21, fig. 9; Brann and Kent, 1960, p. 151

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: Hinds Co., Jackson (type), Town Creek. LA.: Grant Par., Montgomery, Red R.

Types.—Syntypes, ANSP

Callista (Callista) perovata (Conrad)

Veneridae

Cytherea perovata Conrad, 1833b, p. 37, not pl. 19, fig. 5 as in text, (Harris reprint, 1893, p. 59, pl. 20, fig. 4); Conrad, App. in Morton, 1834, p. 8; Conrad, 1842b, p. 179, footnote; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265 *per-ovata*; Heilprin, 1881, p. 364; Aldrich, 1885c, p. 306; Harris, 1895b, p. 34

Cytherea comis Lea, Dec. 1833, p. 66, pl. 2, fig. 41; Conrad, App. in Morton, 1834, p. 8 = *C. perovata* Conrad; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 380; Meyer, 1885a, p. 467; Harris, 1895b, p. 12 (= *C. perovata* Conrad)

Meretrix perovata (Conrad), Conrad, 1854, p. 30; Cossmann, 1893, p. 10; Harris, 1919, p. 138, pl. 43, figs. 12, 13, 13a, 14 (not 11 and 12a as in text); Brann and Kent, 1960, p. 545

Dione perovata (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Cytherea aequorea Mut. *comis* Lea, de Gregorio, 1890, pp. 216, 217, pl. 33, fig. 23, copy Lea, figs. 24, 25; pl. 34, figs. 1-4

Callista (Callista) perovata (Conrad), Palmer, 1927/1929, p. 74, pl. 14, figs. 9a, 11, 15, 21, 22; Conrad, 1833b not Conrad, 1832 as in text; Brann and Kent, 1960, p. 153

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. [cf. GA.: Burke Co., Shell Bluff, Savannah R., Harris, 1919]

Types.—Syntypes (6) ?, No. 30525 ANSP Moore, 1962, p. 86

Callista (Costacallista) perovata aldrichi (Harris)

See *Callista (Costacallista) aldrichi* (Harris)

Callista (Callista) perovata lisbonensis (Harris)**Veneridae**

Meretrix perovata var. *lisbonensis* Harris, 1919, p. 137, pl. 43, figs. 8, 9; Brann and Kent, 1960, p. 546

Callista (Callista) perovata lisbonensis (Harris), Palmer, 1927/1929, p. 75, pl. 14, figs. 2, 7, copy syntypes, 8; Brann and Kent, 1960, p. 153

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); base of bluff, Claiborne, Alabama R.; S. C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg

Types.—Syntypes, Nos. 1158, 1159 PRI

Callista (Callista) perovata subvitrea (de Gregorio)**Veneridae**

Cytherea aequorea mut. *subvitrea* de Gregorio, 1890, p. 217, pl. 33, figs. 16-22

Meretrix perovata var. *subvitrea* (de Gregorio), Harris, 1919, p. 138, pl. 43, fig. 11; Brann and Kent, 1960, p. 546

Callista (Callista) perovata subvitrea (de Gregorio), Palmer, 1927/1929, p. 75, pl. 14, fig. 6; Brann and Kent, 1960, p. 153

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff (type, supposedly the Gosport sd.), Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R.

Types.—Syntypes, No. 26451, De Gregorio Coll. PRI

Callista (Callista) subimpressa (Conrad)

See *Macrocallista subimpressa* (Conrad)

Callista (Callista) sylvaerupis (Harris)

See *Macrocallista sylvaerupis* (Harris)

Callocardia

The type species of the genus *Callocardia* is Recent, off Korea. The genus does not occur in the Cenozoic of North America. See Palmer, 1927/29, p. 38, pl. 7, figs. 1, 4, 11 type species *C. guttata* Adams.

Callocardia (Agriopoma) amichel Gardner

See *Pitar* ("Agriopoma") *amichel* (Gardner)

Callocardia astartoides Gardner

See *Rhabdopitaria astartoides* (Gardner)

Callocardia bastropensis (Harris)

See *Katherinella* ? *trigoniata bastropensis* (Harris)

Callocardia biboraensis Gardner

See cf. *Pitar biboraensis* (Gardner)

Callocardia hawtofi Gardner

See cf. *Pitar hawtofi* (Gardner)

Callocardia kempae Gardner

See cf. *Pitar kempae* (Gardner)

Callocardia mortoni (Conrad)

See *Callista (Costacallista) mortoni* (Conrad)

Callocardia pteleina Gardner
See *Pitar pteleina* (Gardner)

Callocardia (Agriopoma) securiformis (Conrad)
See *Pitar (Pitar) securiformis* (Conrad)

Callocardia (Agriopoma) tornadonis (Harris)
See *Pitar (Pitar) tornadonis* (Harris)

Callocardia spp.
See *Pitar* spp.

Calorhadia (Litorhadia) acala (Dall)

Nuculanidae

Leda elongatoidea Aldrich, 1895b, p. 17, in part, not pl. 5, fig. 2
Leda acala Dall, 1898b, p. 586, pl. 32, fig. 3; Schuchert, *et al.*, 1905, p. 344

Calorhadia (Litorhadia) acala (Dall), Stewart, 1930, p. 52 in part, type species *Litorhadia* Stewart, 1930; Gardner, 1945, p. 44; Stenzel, Krause and Twining, 1957, p. 50 in part

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

Localities.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type); *Choctaw Co.*, Butler

Type.—Holotype, No. 145627 USNM

Calorhadia (? Litorhadia) albirupina (Harris)

Nuculanidae

Leda albirupina Harris, 1894b, p. 148, pl. 6, fig. 1; Dall, 1898b, p. 578; Schuchert, *et al.*, 1905, p. 344

Nuculana albirupina (Harris), Harris and Palmer, 1946, p. 57, pl. 13, figs. 15, 16; Wilbert, 1953, p. 122, pl. 2, fig. 7; Brann and Kent, 1960, p. 607

Calorhadia (? Litorhadia) albirupina (Harris), Stenzel, Krause, and Twining, 1957, p. 52

Range.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

Localities.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type); *Drew Co.*, Wadsworth's well, Long Prairie

Types.—Syntypes, No. 135140 USNM

Calorhadia (Litorhadia) aldrichiana (Harris)

Nuculanidae

Yoldia aldrichiana Harris, 1897b, p. 53, pl. 8, fig. 15; Brann and Kent, 1960, p. 983. Not *Leda elongatoidea* ? var. Harris, 1896, p. 55, pl. 14, fig. 10 as stated by Harris, 1897b, p. 53 = Midway

Calorhadia (Litorhadia) aldrichiana (Harris), Stewart, 1930, p. 52 in part see also *C. acala* (Dall); Stenzel, Krause, and Twining, 1957, p. 50, in part

Comparing the holotype of "*Yoldia*" *aldrichiana* Harris with the type figure of "*Leda*" *acala* Dall, the forms do not appear to be the same. We are separating the species.

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 155 PRI

Calorhadia (Litorhadia) aldrichiana sabinetownensis (Barry) **Nuculanidae**

Leda aldrichiana Harris var., Harris, 1899b, p. 301, pl. 53, fig. 5 not var.; Brann and Kent, 1960, p. 473 not as "var."

Nuculana aldrichiana var. *sabinetownensis* Barry, 1942+, p. 47, pl. 2, figs. 11-13; Wasem and Wilbert, 1943, p. 192

Range.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine] gr.

Localities.—TEXAS: *Sabine Co.*, bluff $\frac{1}{4}$ mi. downstream from Sabinetown Ferry ldg., (type); cultivated hillside on E. D. Britt's farm in NW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 10, T. 5 N., R. 13 W.; water well on D. R. Hayes's land in NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 26, T. 7 N., R. 10 W., depth 35 ft.

Types.—Holotype, No. 5074; paratype, No. 5074 A, LSU Pal. Mus.

Calorhadia (Litorhadia ?) bastropensis (Harris)**Nuculanidae**

Leda bastropensis Harris, 1895a, p. 46, pl. 1, fig. 3; Dall, 1898b, p. 578; Harris, 1919, p. 64, pl. 24, figs. 9, 10; Brann and Kent, 1960, p. 473; not ? Gardner in Trowbridge, 1923, p. 95; not Renick and Stenzel, 1931, p. 104 [*fide* Stenzel, Krause, and Twining]

? Not *Calorhadia (Litorhadia) bastropensis* (Harris), Gardner, 1945, p. 46 [*fide* Stenzel, Krause, and Twining]

Calorhadia (Litorhadia ?) bastropensis (Harris), Stenzel, Krause, and Twining, 1957, p. 51, pl. 4, figs. 10, 11

Range.—Middle Eocene. Viesca mem., Weches fm. (type), middle Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville, about 625 ft. downstream from new bridge, on State Highway 71, built in 1950 (type), (Stenzel, Krause, and Twining, 1957); *Sabine Co.*, Sabine R.

Type.—Holotype, No. 221, old number, recatalogued, No. 35579 (?) BEG

Calorhadia bella (Conrad)**Nuculanidae**

Nucula bella Conrad, 1833a, Jan., p. 343; Conrad, App. in Morton 1834, p. 7; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 7; Schenck, 1934, p. 48

Nucula plicata Lea, 1833 Dec., p. 85, pl. 3, fig. 64; Conrad, App. in Morton, 1834, p. 7 = *N. bella* Conrad; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 35; Schenck, 1934, p. 53

Leda bella (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 64, pl. 24, figs. 11-16; Brann and Kent, 1960, pp. 473, 474 fig. 13 not lost same as fig. 11

Nuculana bella (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15 see under *N. Brongniarti* (Lea)

Nuculana plicata (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

Leda plicata (Lea), de Gregorio, 1890, p. 189, pl. 23, figs. 6-10; fig. 11 Lea's type (*L. bella* sp. dubious [in part]); Dall, 1898b, p. 578

Calorhadia bella (Conrad), Gardner, 1939, p. 341

Range.—Middle Eocene. McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Bienville Par., Marble Quarry; Hammett's Branch (Harris). S.C.: Orangeburg Co., 6 mi. WNW. Orangeburg (Harris)

Types.—Possible syntypes (2), No. 30575 ANSP Moore, 1962, p. 41

Calorhadia (Calorhadia) compsa (Gabb)

Nuculanidae

Leda compsa Gabb, 1860d, p. 387, pl. 67, fig. 57; Heilprin, 1891a, p. 403; Gardner in Trowbridge, 1923, p. 95; Deussen, 1924, p. 67

Nuculana compsa (Gabb), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Harris and Palmer, 1946, p. 55

Leda opulenta compsa Gabb, Harris, 1919, p. 62, pl. 24, figs. 1, 2; Renick and Stenzel, 1931, p. 104

Calorhadia (Litorhadia) compsa (Gabb), Gardner, 1945, p. 45

Calorhadia (Calorhadia) compsa (Gabb), Stenzel, Krause, and Twinning, 1957, p. 47, pl. 4, figs. 8, 9, 12-14

Range.—Middle Eocene. Stone City beds (type) (Stenzel, Krause, and Twinning, 1957), middle Claiborne gr.

Localities.—TEXAS: "Caldwell Co." Gabb=Burleson Co., Stone City Bluff, Brazos R., (type); *vide* Stenzel, Krause, and Twinning, 1957, p. 11

Type.—Holotype, ANSP

Calorhadia (Litorhadia) elongatoidea (Aldrich)

Nuculanidae

Leda elongatoidea Aldrich, 1895b, p. 17, (in part=*L. acala* Dall), pl. 5, fig. 2; Harris, 1897b, p. 50, pl. 8, fig. 8, not fig. 9=*C. (L.) elongatoidea* "var."; Dall, 1898b, p. 587 not p. 586=*Leda acala* Dall; Trowbridge, 1932, pl. 39, figs. 1, 2; Brann and Kent, 1960, p. 475

Not *Leda elongatoidea* Aldrich "var." Harris, 1896, p. 55, pl. 4, fig. 10 (=Midway Paleocene)

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox [Sabine] gr.

Localities.—ALA.: Choctaw Co., Butler (type); Clarke Co., Woods Bluff, Tombigbee R.; Dale Co., Ozark; Marengo Co., Nana-falia, Tombigbee R. (all except Butler, Harris identification)

Type.—Holotype, No. 638962 USNM

Calorhadia (Litorhadia) elongatoidea (Aldrich) "var."

Nuculanidae

Not *Leda elongatoidea* Aldrich, 1895a, p. 17, pl. 5, fig. 2

Leda elongatoidea Aldrich "var.", Harris, 1896, p. 55, pl. 4, fig. 10; Brann and Kent, 1960, p. 476

Calorhadia (Litorhadia) elongatoidea (Aldrich) "var.", Stenzel, Krause, and Twinning, 1957, p. 50

Range.—Paleocene. Matthews Ldg. mem., Porters Creek fm.; upper Midway gr.

Locality.—ALA.: Wilcox Co., Matthews Ldg., Alabama R.

Type.—Figured specimen, formerly PRI, lost prior to 1937

Calorhadia (Litorhadia) elongatoidea (Aldrich) "var."

Nuculanidae

Leda elongatoidea Aldrich, Harris, 1897b, p. 50 in part, pl. 8, fig. 9 "var." not fig. 8; Brann and Kent, 1960, p. 475

Range.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Greggs Ldg., Alabama R.

Type.—Figured specimen, No. 150 PRI

Calorhadia equalis (Conrad)

Nuculanidae

Nucula equalis Conrad, 1833c, p. 46 (Harris reprint, 1893, p. 72); Conrad, App. in Morton, 1834, p. 7 as *aequalis*; H. C. Lea, 1849, p. 102 as *aequalis*; Harris, 1895b, p. 19 (p. 2 *aequalis*); Schenck, 1934, p. 48. Not J. de Carle Sowerby, 1840a, expl. pl. 39

Nucula media Lea, 1833, p. 83, pl. 3, fig. 62; Conrad, App. in Morton, 1834 p. 7=*N. aequalis* Conrad; H. C. Lea, 1849, p. 102; ? Aldrich, 1886, p. 49; Harris, 1895b, p. 27

Leda aequalis (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578 "(non Reuss ? + ? *media* Lea, non Wissm.)"

Nuculana aequalis (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Nuculana media (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

Cf. *Leda media* (Lea), Aldrich, 1886, p. 48; Harris, 1919, p. 65 in part, pl. 25, fig. 4 ? Claiborne, Lisbon Bluff in text; Brann and Kent, 1960, p. 476 in part, No. 602 only

Leda media (Lea), de Gregorio, 1890, p. 188, pl. 23, figs. 1-3, fig. 4 copy *media* Lea; Harris, 1919, p. 65 in part, pl. 25, figs. 1-3; Gardner, 1927, p. 365; Brann and Kent, 1960, p. 476 in part, not No. 602

Calorhadia media (Lea), Gardner, 1939, p. 341

Range.—Middle Eocene. Cf. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). Cf. Lisbon Bluff, Alabama R.

Types.—Probable holotype No. 30719 ANSP Moore, 1962, p. 59.

Nucula media Lea, Nos. 5411-5413 ANSP possible syntypes

Calorhadia (Litorhadia ?) evanescentior Stenzel and Krause Nuculanidae

Calorhadia (Litorhadia ?) evanescentior Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 52, pl. 4, figs. 21-25

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20683 BEG (fig. 23); paratypes, No. 20684 BEG (figs 21, 22), No. 20705 BEG (figs. 24, 25), Nos. 20787, 20788 BEG unfig'd paratypes

Calorhadia (Calorhadia) hammetti (Harris)

Nuculanidae

Leda opulenta var. *hammetti* Harris, 1919, p. 62, pl. 23, fig. 23; Brann and Kent, 1960, p. 478

Nuculana hammetti (Harris), Harris and Palmer, 1946, p. 55

Calorhadia (Calorhadia) hammetti (Harris), Stenzel, Krause, and Twining, 1957, p. 48

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: Bienville Par., Hammett's Branch, SW. ¼ sec. 30, T. 18 N., R. 6 W., about 2 mi. NE Mt. Lebanon (type)

Type.—Holotype, No. 589 PRI

Calorhadia houstonia (Harris)**Nuculanidae**

Leda houstonia Harris, 1895a, p. 47, pl. 1, fig. 5; Dall, 1898b, p. 578; Harris, 1919, p. 59, (only) not pl. 23, fig. 13 [= *C. trivittate* (Gardner)]; Gimbrede, 1962, pp. 1118, 1119

Calorhadia houstonia (Harris), Stenzel, Krause, and Twining, 1957, p. 51

"*Leda* (*Nuculana*) *subtrigona* Con. ? S. Carolina", Harris, 1919, p. 59 specimens so labelled in ANSP *vide* Harris

Range.—Middle Eocene. Hurricane lentil (type), base of Landrum mem., Cook Mt. fm., upper Claiborne gr. [Stenzel, Krause, and Twining, 1957, p. 51]

Localities.—TEXAS: *Houston Co.*, Alabama Ferry, Trinity R. (type) [*vide* Stenzel, Krause, and Twining 1957, p. 51]; *Lee Co.*, between Orell's and Evergreen Crossing, Elm Creek; along Elm creek from Orell's to Prides Crossing

Type.—Holotype, possibly 35568 BEG

Calorhadia (? Calorhadia) mater (Meyer)*** Nuculanidae**

Leda mater Meyer, 1885a, p. 460; Meyer, 1886b, p. 79, pl. 3, fig. 20; Harris, 1894b, p. 147; Dall, 1898b, p. 578

Calorhadia mater (Meyer), Gardner, 1939, p. 341

Calorhadia (*Litorhadia*) *mater* (Meyer), Gardner, 1945, p. 47

Nuculana mater (Meyer), Harris and Palmer, 1946, p. 56, pl. 13, figs. 12-14

Calorhadia (? *Calorhadia*) *mater* (Meyer), Stenzel, Krause, and Twining, 1957, p. 48

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type). ARK.: *Cleveland Co.*, Vince Ferry, Saline R.; Cross Roads Church, 5 mi. NW of Kingsland. TEXAS: Rio Grande embayment (Gardner)

Type.—Holotype, No. 638697 USNM (figured 1886b, pl. 3, fig. 20)

Calorhadia media (Lea)

See *Calorhadia equalis* (Conrad)

Calorhadia (Calorhadia) opulenta (Conrad)**Nuculanidae**

Nucula opulenta Conrad, 1833c, p. 46 (Harris reprint, 1893, p. 72); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 31; Schenck, 1934, p. 52

Nucula pulcherrima Lea, 1833, p. 84 in part; H. C. Lea, 1849, p. 102 in part; Harris, 1895b, p. 37 in part one so-called type is yg. of *opulenta*, Conrad, 1854, p. 29

Nuculana opulenta (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Stewart, 1930, p. 50; Harris and Palmer, 1946, p. 55, pl. 13, fig. 8 not fig. 9; Brann and Kent, 1960, p. 609

Leda opulenta (Conrad), de Gregorio, 1890, p. 189; Dall, 1898b, pp. 578, 587; Harris, 1919, p. 62, pl. 23, figs. 20-22; Brann and Kent, 1960, pp. 477, 478

Calorhadia opulenta (Conrad), Gardner, 1939, p. 341

Calorhadia (*Calorhadia*) *opulenta* (Conrad), Stenzel, Krause, and Twining, 1957, p. 48

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (2), No. 30503 ANSP Moore, 1962, p. 81

Calorhadia cf. opulenta (Conrad)

Nuculanidae

Nuculana opulenta—like Harris and Palmer, 1946, p. 56, pl. 13, fig. 9; Brann and Kent, 1960, p. 609

Cf. *Nuculana reginajacksonensis* Wilbert, 1953, p. 123 error for *reginajacksonis*

Range.—Upper Eocene. White Bluff fm., lower Jackson gr.

Locality.—ARK.: Jefferson Co., White Bluff, S. bank Arkansas R.

Type.—Figured specimen, No. 4222 PRI

Calorhadia (Litorhadia) petropolitana Stenzel and Krause **Nuculanidae**

Calorhadia (Litorhadia) petropolitana Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 50, pl. 4, figs. 18-20

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20736 BEG (figs. 18, 19); paratype No. 20738 BEG (fig. 20); No. 20737 BEG unfigured paratypes

Calorhadia (Calorhadia) pharcida (Dall)

Nuculanidae

Nuculana protexta Conrad, 1865a, p. 13; Conrad, 1865c, p. 147, pl. 11, fig. 6; Conrad, 1866a, p. 4. Not *Leda protexta* Gabb, 1860a, p. 303 = *Nuculana protexta* Cretaceous. Not *Nuculana protexta* Conrad, Harris, 1894b, p. 147, Ark., Jackson Eocene

Leda protexta (Conrad), Heilprin, 1881, p. 365; Aldrich, 1886, pp. 50, 53, 57; de Gregorio, 1890, p. 190, pl. 23, fig. 14 copy Conrad; Harris, 1897b, p. 52, pl. 8, fig. 13; Brann and Kent, 1960, p. 478; not *Leda protexta* Clark, 1895 p. 5; not Clark, 1896 p. 82 (= *Nuculana potomacensis* Clark and Martin)

Leda pharcida Dall, 1898b, p. 587, pl. 32, fig. 8; Schuchert, et al, 1905, p. 346

Calorhadia pharcida (Dall), Stewart, 1930, pp. 50, 51 type species *Calorhadia* Stewart

Nuculana pharcida (Dall), Harris and Palmer, 1946, p. 55

Calorhadia (Calorhadia) pharcida (Dall), Stenzel, Krause, and Twining, 1957, p. 46, 48

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. Cf. middle Wilcox [Sabine] gr., see localities

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigee R. (type); Greggs Ldg., Alabama R.; Bells Ldg., Alabama R. (Aldrich); 4 mi. above Hamilton Bluff, Alabama R.; Dale Co., Ozark. GA.: Clay Co., Ft. Gaines

Types.—Holotype, No. 145633 USNM; *Nuculana protexta* Conrad, missing ANSP Moore, 1962, p. 90

Calorhadia pistorus (Harris)**Nuculanidae**

Leda pistorus Harris, 1919, p. 65, pl. 24, figs. 17, 18

Calorhadia pistorus (Harris), Gardner, 1939, p. 341

Range.—Middle Eocene. Gosport sd, (type), uppermost Claiborne gr.

Locality.—ALA.: *Washington Co.*, Bakers Bluff, Tombigbee R. (type); Baker Hill (Gopher Hill), 1 mi. above St. Stephens Bluff, Tombigbee R. (Gardner)

Type.—Holotype, No. 67, GSATC

Calorhadia (Calorhadia) potomacensis (Clark and Martin)**Nuculanidae**

Leda protexta (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 82. Not

Nuculana protexta Conrad, 1865c, p. 147; not Gabb, 1860a, p. 303

Leda potomacensis Clark and Martin, 1901, p. 200, pl. 56, figs. 9, 10;

Harris and Palmer, 1946, p. 56

Calorhadia (Calorhadia) potomacensis (Clark and Martin), Stenzel, Krause, and Twining, 1957, p. 48

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: *King George Co.*, Woodstock (type); *Caroline Co.*, Port Royal. MD.: *Charles Co.*, Pope's Creek; W. of Port Tobacco; 1 mi SE. of Piscataway; ½ mi. below Chapel Point; *Prince Georges Co.*, Charles Branch between Rosaryville and Upper Marlboro

Types.—Syntypes, USNM

Calorhadia (Calorhadia) praecompsa Stenzel and Krause**Nuculanidae**

Calorhadia (Calorhadia) praecompsa Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 49, pl. 4, figs. 15-17

Range.—Middle Eocene. Viesca mem., Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

Types.—Holotype, No. 20709 BEG, unfigured paratypes, No. 20710 BEG

Calorhadia (Calorhadia) reginajacksonis (Harris)**Nuculanidae**

Leda regina-jacksonis Harris, 1897a, p. 470, pl. 18, fig. 3; Dall, 1898b, p. 587

Nuculana regina-jacksonis (Harris), Harris and Palmer, 1946, p. 54, pl. 13, figs. 5-7

Nuculana reginajacksonis (Harris), Stewart, 1930, pp. 49, 50 in part; Brann and Kent, 1960, p. 609

Calorhadia (Calorhadia) reginajacksonis (Harris), Stenzel, Krause, and Twining, 1957, p. 48

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; upper Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Catahoula Par.*, Danville Ldg., Ouachita R. ARK.; *Jefferson Co.*, White Bluff, Arkansas R.

Types.—Holotype missing, unfigured paratype, ANSP

Calorhadia (Calorhadia) reginajacksonis (Harris) "var."**Nuculanidae**

Nuculana regina-jacksonis Harris "var.," Harris and Palmer, 1946, p. 54, pl. 13, figs. 10, 11; Brann and Kent, 1960, p. 609

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.
Locality.—MISS.: Hinds Co., Jackson
Type.—Figured specimen, No. 4223 PRI

Calorhadia semen (Lea)**Nuculanidae**

Nucula semen Lea, 1833, p. 200, pl. 6, fig. 214; H. C. Lea, 1849, p. 102; Aldrich, 1886, p. 49; Harris, 1895b, p. 41; Schenck, 1934, p. 53
 ? *Nucula mucronata* Conrad, 1848a, p. 297 S.C.; Conrad, 1848b, p. 128, pl. 14, fig. 2 S. C. *fide* Harris, 1919, p. 56 not *mucronata* [sic] as in Harris, 1919, p. 56. Not *Nucula mucronata* J. de C. Sowerby, 1824, p. 120, pl. 476, fig. 4

? *Leda mucronata* (Conrad), Conrad, 1854, p. 29

? *Nuculana mucronata* (Conrad), Conrad, 1865a, p. 13 not Vicksburg

Nuculana semen (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Cossmann, 1893, p. 15

Leda semen (Lea), de Gregorio, 1890, p. 190, pl. 23, fig. 13 copy Lea; Dall, 1898b, p. 578; Harris, 1919, p. 56, pl. 23, figs. 1-4; Brann and Kent, 1960, p. 479

Calorhadia semen (Lea), Gardner, 1939, p. 341

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Hamilton Bluff, Alabama R.; Lisbon Bluff, Alabama R. (Harris). S.C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg (Harris); Calhoun Co., "St. Matthew's parish, Orangeburg District" (type) *N. mucronata* Conrad

Type.—Lost [*fide* Harris, 1919, p. 56]. *Nucula mucronata* Conrad, missing Moore, 1962, p. 78

Calorhadia semenoides (Aldrich)**Nuculanidae**

Leda semenoides Aldrich, 1895b, p. 18, pl. 5, fig. 5; Dall, 1898b, p. 578 *semenoidea*; Harris, 1919, p. 57, pl. 23, figs. 5, 6; Brann and Kent, 1960, p. 479

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. GA.: Clay Co., Fort Gaines

Type.—Holotype, No. 638964 USNM

Camptonectes calvatus (Morton)

See *Eburneopecten calvatus* (Morton)

Camptonectes claibornensis Conrad *nomen nudum*

See *Eburneopecten scintillatus* (Conrad)

Camptonectes scintillatus (Conrad)

See *Eburneopecten scintillatus* (Conrad)

Cardita alticosta [sic] Conrad

See *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)

Cardita alticosta [sic] Gabb, 1869, p. 268 not Conrad=*Cardita arivechensis* Heilprin

See under *Venericardia alticostata* (Conrad)

Cardita alticostata ConradSee *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)See also *Venericardia* (*Claibornicardia*) *sillimani* (Lea)*Cardita bilineata* ConradSee *Venericardia bilineata* (Conrad)*Cardita bilineata* Tuomey, 1848, p. 153; Harris, 1919, p. 200 *nomen nudum*; not *Cardita bilineata* Conrad, 1848a and bSee *Venericardia bilineata* (Conrad)*Cardita brittoni* WhitfieldSee *Venericardia brittoni* (Whitfield)*Cardita carolinensis* ConradSee *Venericardia carolinensis* (Conrad)*Cardita decusata* [sic] Tuomey, 1858, p. 271 *nomen nudum*. Not *V. decussata* Lamarck, 1806, p. 59See *Venericardia* (*Venericor*) *greggiana* Dall*Cardita densata* ConradSee *Venericardia* (*Venericor*) *densata* (Conrad)*Cardita* "dorsata Conrad", Cossmann, 1893, p. 14 [typ. error] for *Cardita densata* Conrad*Cardita inflator* (Meyer)See *Venericardia* (*Pleuromeris*) *inflator* Meyer*Cardita intermedia* WhitfieldSee *Venericardia intermedia* (Whitfield)*Cardita parva* (Lea)See *Venericardia* (*Pleuromeris*) *parva* Lea*Cardita perantiqua* (Conrad)See *Venericardia* (?) *perantiqua* Conrad*Cardita planicosta* (Lamarck), Conrad in Emory, 1857, p. 161, pl. 19, figs. 2a, 2b; Schuchert, et al., 1905, p. 127, No. 9900See *Venericardia densata* (Conrad), Gardner, and Bowles, 1939, p. 189 or *V. mooreana* Conrad, 1867c, Texas*Cardita planicosta* of authors*Cardita planicosta* Conrad, 1832a; Conrad, App. in Morton, 1834; H. C. Lea, 1849; Heilprin, 1884b, Cossmann, 1893. Not *C. planicosta* (Lamarck)See *Venericardia* (*Venericor*) *regia* Conrad*Cardita* (*Venericardia*) *planicosta* Lamarck, de GregorioSee *Venericardia* (*Venericor*) *claiboplata* Gardner and Bowles*Cardita planicosta* var. *regia* (Conrad)See *Venericardia* (*Venericor*) *regia* Conrad*Cardita rotunda* (Lea)See *Venericardia rotunda* Lea*Cardita subquadrata* Conrad, 1848a; not Gabb, 1860a, not Gabb, 1860dSee *Venericardia* (?) *subquadrata* (Conrad)

Cardita subquadrata Gabb, 1860a, p. 303; not Gabb, 1860d, p. 395; not Conrad, 1848a

See *Venericardia perantiqua* (Gabb)

Cardita subquadrata Gabb, 1860d, p. 395; not Gabb, 1860a, p. 303; not Conrad, 1848a

See *Venericardia* (*Venericor*) *hijuana* Gardner and Bowles

Cardita subrotunda Conrad

See *Venericardia subrotunda* (Conrad)

Cardita tetrica Conrad *nomen nudum*

Cardita tetrica Conrad in Wailes 1854, p. 289 *nomen nudum* (reprint, 1939, p. 19); Aldrich, 1885c, p. 307; Heilprin, 1891a, p. 403; Dall, 1903a, p. 1424; Harris and Palmer, 1946, pp. 69, 70 under *V. diversidentata* Meyer

Venericardia tetrica (Conrad), Harris, 1894b, p. 149; Dall, 1903a, pp. 1427, 1429

The name is a *nomen nudum* although used by Aldrich, Harris, and Dall in comparison with or equivalent to other species.

Cardita (*Venericardia*) *transversa* Lea

See *Venericardia* (*Claibornicardia*) *alticostata* (Conrad)

See also *Venericardia* (*Claibornicardia*) *sillimani* Lea

Cardita (*Venericardia*) *transversa* Mut. *juvenis* de Gregorio

See *Venericardia* (*Pleuromeris*) *parva* Lea

Cardita (*Venericardia*) *transversa* Mut. *rotunda* Lea

See *Venericardia* (*Venericardia*) *rotunda* Lea

Cardita (*Venericardia*) *transversa* Mut. *secans* de Gregorio

See *Venericardia* (*Claibornicardia*) *sillimani* Lea

Cardita (*Venericardia*) *transversa* Mut. *Sillimani* Lea

See *Venericardia* (*Claibornicardia*) *sillimani* Lea

Cardita (*Venericardia*) *transversa* (Lea) Mut. *transversa* Lea

See *Venericardia alticostata* (Conrad)

Cardita trapezium Tuomey

See *Venericardia* (?) *trapezium* (Tuomey)

Cardita vigintinaria Conrad

See *Venericardia vigintinaria* (Conrad)

Cardium (*Anthocardia* [sic]) *avonum* Richards

See *Trigonocardia* (*Americardia*) *avona* (Richards)

Cardium cf. *cabezai* (Gardner)

See *Cardium* sp.

Cardium (*Trachycardium*) *claibornense* Aldrich

See *Agnocardia claibornensis* (Aldrich)

Cardium cf. *C. claibornense* Aldrich, Richards and Palmer, 1953

See *Cardium* sp.

Cardium (*Trachycardium*) *claibornense* Aldrich, Harris, 1919 in part

See *Cardium* sp.

Cardium (*Agnocardia*) cf. *claibornense* Aldrich, Harbison, 1944
See *Agnocardia* sp.

Cardium diversum Conrad, Tuomey, 1858, Bells Ldg., Monroe Co., Ala.
Not *Cardium diversum* Conrad, 1848a, p. 292=Vicksburg Oligocene

***Cardium diversum* "var." mittens de Gregorio** **Cardiidae**

Cardium diversum var. *mittens* de Gregorio, 1890, p. 215, pl. 33, figs. 5, 6; Vicksburgian *fide* Harris, 1919, p. 201 *Curdium* [sic] typ. error

Range.—?

Locality.—?

Type.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

Cardium eversum Conrad, Harris, 1951
See *Cardium* spp.

Cardium gardnerae Cooke
See *Laevicardium gardnerae* (Cooke)

***Cardium harrisi* Vaughan** **Cardiidae**

Cardium sp. Harris, 1894b, p. 142

Cardium harrisi Vaughan, 1895, p. 219 *nomen nudum*; Vaughan, 1896, pp. 20, 37, 48, pl. 4, figs. 1, 2

Cardium (*Tropidocardium*) *Harrisi* Vaughan, Dall, 1900, p. 1092

Cardium harrisi Vaughan, Harris, 1919, p. 131, pl. 41, figs. 5-6 type, fig. 7; Brann and Kent, 1960, p. 174

Range.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: Winn Par., S. of marble quarry (Harris); *Bienville* Par., Mount Lebanon (type); see Vaughan for further La. localities. ALA.: *Monroe* Co., Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. ARK.: *Ouachita* Co., Walnut Bluff, Ouachita R.

Type.—Holotype, No. 147045 USNM

***Cardium harrisi gainesense* Harris** **Cardiidae**

Cardium harrisi var. *gainesense* Harris, 1919, p. 131 footnote, p. 132, Fort Gaines, Ga.

This subspecies was not figured or adequately described by Harris. The type was lost probably in preparation. The name would best be regarded as a *nomen nudum*.

Range.—Lower Eocene

Locality.—GA.: *Clay* Co., Fort Gaines

Type.—Holotype, lost

Cardium hatchetigbeensis Aldrich

See *Acanthocardia* (*Schedocardia*) *hatchetigbeensis* (Aldrich)

***Cardium knappi* Weller** **Cardiidae**

Cardium knappi Weller, 1907, p. 595, pl. 66, figs. 4-7

Range.—Paleocene. Hornerstown fm. (type). Lower Eocene. Vincentown fm. (type). [type age not discriminated]

Localities.—N.J.: *Monmouth* Co., near Deal (syntype); *Ocean* Co., New Egypt (syntype); *Burlington* Co.; near Juliustown (syntype) [type locality not selected]

Types.—Syntypes, Nos. 7477, 7478, 7486 State Mus., Trenton, N.J.

Cardium (*Protocardia*) *lene* Conrad
See *Nemocardium lene* (Conrad)

Cardium (*Dinocardium*) *levyi* Richards
See *Laevicardium* (*Dinocardium*) *levyi* Richards

Cardium nicoletti Conrad
See *Nemocardium nicoletti* (Conrad)

Cardium nicoletti Conrad, Tuomey, 1858, pp. 264, 271
See *Nemocardium harrisi* (Dall)

Cardium nicoletti Conrad "var." Aldrich, 1886
See *Nemocardium harrisi* (Dall)

***Cardium nucleolum* (Whitfield)**

Cardiidae

Criocardium nucleolus Whitfield, 1885, p. 214, pl. 28, figs. 10, 11;
Whitfield, 1899, p. 156

Cardium nucleolus (Whitfield), Weller, 1907, p. 575, pl. 63, figs. 8, 9
type

Range.—Lower Eocene. Manasquan fm. (type)

Locality.—N. J.: Monmouth Co., Farmingdale (type)

Type.—Syntype, No. 9013/1 AMNH

Cardium ouachitense Harris
See *Trachycardium ouachitense* (Harris)

Cardium palmerae Harbison
See *Laevicardium* (*Dinocardium*) *palmerae* (Harbison)

Cardium (*Trigoniocardium*) *protoaliculum* Richards
See *Trigoniocardium protoaliculum* Richards

Cardium tuomeyi Aldrich
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)

Cardium tuomeyi Aldrich, Harris, 1899b
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich) subsp.

Cardium tuomeyi Aldrich "var.", Harris, 1899b; Barry, 1942+
See cf. *Plagiocardium* sp.

Cardium vicksburgense Tuomey, 1858
See *Acanthocardia* (*Schedocardia*) *tuomeyi* (Aldrich)

"Cardium" sp.

Cardiidae

Cardium sp. Gardner, 1935, p. 179

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Milam Co., Brazos R., 1 mi. below Falls Co.
line

Type.—Unfigured specimen, not found USNM, 1962

Cardium sp. Harris, 1894b, p. 142
See *Cardium harrisi* Vaughan

***Cardium* sp.**

Cardiidae

Cardium eversum Conrad, Harris, 1951, p. 24, pl. 12, figs. 9, 10; Brann
and Kent, 1960, p. 174. Not Conrad, 1848a; p. 291

Range.—Upper Eocene. "Ocala ls.", Ocala gr.
Locality.—FLA.: Marion Co., Dixie Lime Products Co., Reddick
Types.—Figured specimens, Nos. 24514, 24515 PRI

Cardium sp.**Cardiidae**

Cardium sp. Harris, 1894b, p. 34, pl. 1, fig. 8; Harris 1896, [no. p.], pl. 6, fig. 3

Range.—Paleocene. Kincaid fm., lower Midway gr.
Locality.—TEXAS: Maverick Co., USGS sta. 583, 18 mi. SE. of Eagle Pass (C. A. White, 1877 see Gardner, 1935, p. 99)
Type.—Figured specimen (USNM, 1894)

Cardium sp.**Cardiidae**

Cardium cf. *cabezai* (Gardner), Harris, 1951, p. 23, pl. 12, figs. 3, 4 probably not Gardner, 1945, p. 102; Brann and Kent, 1960, p. 173

Range.—Upper Eocene. "Ocala ls.", Ocala gr.
Locality.—FLA.: Marion Co., Ocala Lime Rock Corp., quarry E. side of Highway 314, Gainesville to Ocala, E. of Kendrick
Type.—Figured specimen, No. 24509 PRI

"Cardium" sp.**Cardiidae**

Cardium eversum ? Conrad, Harris, 1951, p. 23, pl. 12, fig. 5; Brann and Kent, 1960, p. 174 not Conrad, 1848a, p. 291

Range.—Upper Eocene. "Ocala ls.", Ocala gr.
Locality.—FLA.: Marion Co., Dixie Lime Products Co. "dump", Reddick
Type.—Figured specimen, No. 24510 PRI

Cardium sp.**Cardiidae**

Cardium sp., Harris, 1951, p. 23, pl. 12, figs. 6-8, 11, 12; Brann and Kent, 1960, p. 178

Range.—Upper Eocene. "Ocala ls.", Ocala gr.
Locality.—FLA.: Marion Co., Dixie Lime Products Co., Reddick; Ocala Lime Rock Corp., E. of Kendrick
Types.—Figured specimens, Nos. 24511-24513, 24516, 24517 PRI

"Cardium" sp.**Cardiidae**

Cardium (*Trachycardium*) cf. *C. claibornense* Aldrich, Richards and Palmer, 1953, p. 52, pl. 11, figs. 5, 6

Range.—Middle Eocene. Avon Park ls. Upper Eocene. Inglis fm., lower Ocala gr.
Localities.—FLA.: Levy Co., pit 2.9 mi. S. of Gulf Hammock; Sulphur Springs, Wekiva R., SW. $\frac{1}{4}$ sec. 32, T. 14 S., R. 16 E. (See Richards and Palmer, 1953, p. 5)
Types.—Figured specimens No. I-7570, No. I-7569, Fla. Geol. Sur.

Cardium sp.**Cardiidae**

Cardium sp. Barry, 1942+, p. 67, pl. 8, fig. 2

Range.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.
Locality.—LA.: Sabine Par., rd. cut in center sec. 12, T. 8 N., R. 14 W.
Type.—Figured specimen, No. 5018, LSU Pal. Mus.

"Cardium" sp.**Cardiidae**

Cardium (*Trachycardium*) *claibornense* Aldrich, Harris, 1919, p. 132 in part, pl. 41, fig. 9

Range.—Middle Eocene. Weches fm., middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Collier's Ferry (= Black Shoals, Brazos R., *vide* Stenzel, Krause, and Twining, 1957, p. 106)

Type.—Figured specimen lost (*vide* Rodda, Bur. Ec. Geol. Univ. Texas, 1963)

Caryatis Delawareensis Conrad, 1868, p. 731; Conrad, 1869b, not *Dione Delawareensis* Gabb, 1860a
See *Pitar ovalis* (Whitfield)

Caryatis exigua Conrad
See ? *Pitar exigua* (Conrad)

Caryatis ovalis Whitfield
See *Pitar ovalis* (Whitfield)

Caryatis ? veta Whitfield
See *Pitar vetus* (Whitfield)
See also under *Glossus veta* (Conrad)

Caryocorbula alabamiensis (Lea)**Corbulidae**

Corbula nasuta Conrad, 1833b, p. 38; not pl. 20, fig. 2 as in text; Conrad, 1835a (Harris reprint, 1893, p. 60, pl. 19, fig. 4); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846c, p. 398, pl. 4, fig. 4; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 382; Tuomey, 1858, pp. 265, 273; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; Aldrich, 1886, p. 48 [listed]; Harris, 1895b, p. 30

Not *Corbula nasuta* G. B. Sowerby I, 1833b, p. 35; not *Corbula nasuta*, Conrad, 1857 p. 161 = *Corbula conradi* Dall; not *C. nasuta* Clark, 1895, 1896 = *Corbula* sp.

Corbula Alabamiensis Lea, 1833, p. 45, pl. 1, fig. 12; Conrad, 1846c, p. 398; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 382; Conrad, 1865a, p. 3 (under *nasuta*); Cossmann, 1893, p. 6; Harris 1895b, p. 3; Harris, 1919, p. 185, pl. 56, figs. 9-10 variations cf. *ima*, 16-26; Brann and Kent, 1960, pp. 253-254

Corbula subnasuta d'Orbigny, 1850, p. 382 for *C. nasuta* Conrad not G. B. Sowerby I, 1833a, p. 35

Corbula (Neaera) nasuta Conrad, de Gregorio, 1890, p. 231, pl. 36, fig. 36 copy *C. alabamiensis* Lea; figs. 37, 38 copies Conrad; figs. 39-50; pl. 37, figs. 1-4

Corbula (Cuneocorbula) alabamiensis Lea, Dall, 1898b, p. 841 in part *Caryocorbula alabamiensis* (Lea), Gardner, 1926b, p. 46 type species *Caryocorbula* Gardner; Gardner, 1928, p. 230; Vokes, 1945, p. 11, pl. 1, figs. 16-20; Stenzel, Krause, and Twining, 1957, pp. 165, 166, pl. 19, figs. 8-13; pl. 20, figs. 1-3, 9, 10; text fig. 27

Corbula (Caryocorbula) alabamiensis Lea, Harris, and Palmer, 1946, p. 115, pl. 24, fig. 16; Brann and Kent, 1960, p. 254

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). See Harris, 1919, p. 187 for localities

Types.—Holotype, No. 5039 ANSP. Syntypes (12), *Corbula nasuta* Conrad, No. 30537 ANSP Moore, 1962, p. 80

Caryocorbula alabamiensis citronella (Harris) **Corbulidae**

Corbula alabamiensis citronella Harris, 1919, pp. 185, 186, pl. 56, figs. 12, 13; Brann and Kent, 1960, p. 255

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: Orangeburg Co., Orangeburg (type)

Types.—Syntypes, Nos. 1284, 1285 PRI

Caryocorbula alabamiensis gregorioi (Cossmann) **Corbulidae**

Corbula compressa var. *gregorioi* Cossmann, 1893, p. 6, pl. 1, figs. 4, 5

Corbula (Cuneocorbula) gregorioi Cossmann, Dall, 1898b, pp. 841, 843, in part

Corbula alabamiensis ? gregorioi Cossmann, Harris, 1919, pp. 186, 188, pl. 56, figs. 14, 15; Brann and Kent, 1960, p. 255

Corbula (Varicorbula) gregorioi Cossmann ?, Gardner, 1945, p. 129 in part, not pl. 9, figs. 11, 12

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5578, Lab. Géol., Sorbonne, Paris

Caryocorbula alabamiensis variation "ima" (de Gregorio) **Corbulidae**

Corbula (Neaera) nasuta var. *ima* de Gregorio, 1890, p. 231, pl. 37, figs. 5-8

Corbula alabamiensis var. *ima* de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p. 185, pl. 56, figs. 9, 10 close to *ima*; Brann and Kent, 1960, p. 254

Corbula (Cuneocorbula) alabamiensis (Lea) *ima* in synonymy, Dall, 1898b, p. 841 in part, p. 842 questions

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily, lost

Caryocorbula alabamiensis variation "tecla" (de Gregorio) **Corbulidae**

Corbula (Neaera) nasuta var. *tecla* de Gregorio, 1890, p. 231, pl. 37, figs. 9-11

Corbula alabamiensis var. *tecla* de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p. 185, pl. 56, figs. 27-30; Brann and Kent, 1960, p. 255

Corbula nasuta var. *tecla* de Gregorio, Dall, 1898b, p. 842, in *C. densata* Conrad

Because "variety" is not recognized by the International Code Zool. Nomen. (1961), and we hesitate to make the form a subspecies in a group as variable as *C. alabamiensis*, we are including De Gregorio's varietal names for reference only.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily, lost

Caryocorbula augustae Gardner**Corbulidae**

Corbula (*Caryocorbula*) *augustae* Gardner, 1927, p. 376, figs. 32, 33

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.
Localities.—TEXAS: *Houston Co.*, Augusta (type)

Types.—Syntypes, Nos. 369, 242 USNM

Caryocorbula cappa Barry**Corbulidae**

Corbula (*Caryocorbula*) *cappa* Barry, 1942+, p. 74, pl. 10, figs. 6-17

Range.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

Localities.—TEXAS: *Sabine Co.*, bluff $\frac{1}{4}$ mi. downstream from Sabinetown Ferry landing, Sabine R. (type); water well on D. R. Haye's land NW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 26, T. 7 N., R. 10 W. LA.: *Sabine Par.*, $\frac{1}{4}$ mi. upstream from bridge over Sabine R. on La. Highway 6, stream bank in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 3, T. 5 N., R. 13 W.

Types.—Holotype, No. 5229; paratypes, Nos. 5033, 5230, 5231, L. S. U. Pal. Mus.

Caryocorbula coloradoensis Gardner**Corbulidae**

Corbula (*Caryocorbula*) *coloradoensis* Gardner, 1935, p. 192, pl. 19, figs. 7-10

Range.—Paleocene. Wills Point fm. (type), upper Midway gr.

Localities.—TEXAS: *Bastrop Co.*, Colorado R. $1\frac{1}{2}$ -2 mi. below Travis-Bastrop Co. line (type). For additional localities see Gardner, 1935

Types.—Syntypes (2), Nos. 370970, 370992 ("paratype") USNM

Caryocorbula densata (Conrad)**Corbulidae**

Corbula densata Conrad in Wailes, 1854, p. 289, pl. 14, fig. 9 (reprint 1939, p. 19, pl. 1, fig. 9); Conrad, 1856a, p. 258 (reprint 1939, p. 4); Conrad, 1865a, p. 3; Conrad, 1866a, p. 24; Meyer, 1885a, p. 462; Harris, 1919, p. 185, pl. 56, figs. 31-33; Richards and Palmer, 1953, p. 54, pl. 12, figs. 8, 9; Brann and Kent, 1960, p. 260

Corbula filosa Conrad, 1865b, p. 137, pl. 10, fig. 7; not Conrad 1865c, p. 145, pl. 20, fig. 5 Vicksburg; Conrad, 1866a, p. 24

Corbula (*Cuneocorbula*) *densata* Conrad, Dall, 1898b, p. 842 in part
Corbula (*Caryocorbula*) *densata* Conrad, Harris and Palmer, 1946, p. 115, pl. 24, figs. 11-15, 17-21; Brann and Kent, 1960, p. 261

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr. [Middle Eocene. Gosport sd., uppermost Claiborne gr. (Harris).]

Localities.—MISS.: *Clarke Co.*, Garland Cr.; *Hinds Co.*, Jackson (type); *Caldwell Co.*, Gibson's Ldg. Ouachita R.; *Yazoo Co.*, Sims Siding about 8 mi. N. of Yazoo City. LA.: *Grant Par.*, Montgomery, Red R. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Harris). ARK.: *St. Francis Co.*, Crow Cr. FLA.: *Levy Co.*, Inglis; Gulf Hammock (Richards and Palmer, 1953, p. 55)

Types.—Syntypes (2), No. 13189 ANSP Moore, 1962, p. 53, [found after 1946]. Holotype, *C. filosa* Conrad, No. 13215 ANSP

Caryocorbula deusseni (Gardner)**Corbulidae**

- Corbula alabamiensis* Lea small var., Vaughan, 1896, p. 47
- Corbula alabamiensis* Lea with vars., Harris, 1919, p. 185 in part, pl. 56, fig. 11 ? not other figures; Brann and Kent, 1960, p. 253
- Corbula gregorioi* Cossmann of authors, not Cossmann, 1893, *fide* Gardner in Deussen, 1924, p. 68 Texas Claiborne gr. lists
- Corbula (Cuneocorbula) deusseni* Gardner in Deussen, 1924, p. 68, pl. 22, figs. 8, 8a
- Corbula alabamiensis* Lea, Price and Palmer, 1928, p. 23; Renick and Stenzel, 1931, p. 103
- Corbula deusseni* Gardner, Renick and Stenzel, 1931, p. 103 cf.; Trowbridge, 1932, pl. 41, figs. 8, 9 copies type
- (?) *Corbula (Caryocorbula) carli* Gardner + (?) *Corbula (Caryocorbula) santanensis* Gardner, 1945, pp. 134, 136, pl. 9, figs. 20, 10, 15 *fide* Stenzel, Krause, and Twining, 1957, p. 166
- (?) *Corbula (Caryocorbula) conradi* Dall in part + (?) *Corbula (Caryocorbula)* sp. cf. *C. (C.) conradi* Dall + (?) *Corbula* sp. cf. *C. (Caryocorbula) conradi* Dall + (?) *Corbula (Caryocorbula)* sp. cf. *C. (C.) engonata* Conrad, Gardner, 1945, pp. 133-135, pl. 9, figs. 13, 16, 14, 6 *fide* Stenzel, Krause, and Twining, 1957, p. 166
- Caryocorbula deusseni* (Gardner), Stenzel, Krause, and Twining, 1957, p. 166, pl. 20, figs. 4-8, 11-21

Range.—Middle Eocene. Viesca mem. (type), Weches fm. middle Claiborne gr.; Stone City fm., middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (Bur. Econ. Geol. loc. No. 11-T-2) (type); *Atascosa Co.*, ¼ mi. W. of Jourdanton

Type.—Holotype, No. 371791 USNM lost (*fide* Wilson list 9/17/61 pers. com.)

Caryocorbula engonatooides Gardner**Corbulidae**

- Corbula (Caryocorbula) engonatooides* Gardner, 1927, p. 375, figs. 30, 31; Gardner, 1945, p. 134, pl. 9, figs. 18, 19, 23 Mexican

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type). MISS.: *Clarke Co.*, Wautubbee. MEXICO: *State of Nuevo León*, Carlos Cantu, China (Gardner)

Types.—Syntypes, Nos. 369250 USNM

Caryocorbula kennedyi Gardner**Corbulidae**

- Corbula (Caryocorbula) kennedyi* Gardner, 1935, p. 191, pl. 19, fig. 5

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Uvalde Co.*, limestone ledge just above trail leading down from Evans' (Myrick's) apiary, Frio R. (type). See Gardner for additional localities

Type.—Holotype, No. 370926 USNM

Caryocorbula willistoni (Meyer)**Corbulidae**

Corbula Alabamensis Owen, 1860, pp. 35, 417, pl. 9, figs. 8, 8a; Call, 1891, p. 8. Not *C. Alabamensis* Lea, 1833, p. 45

Corbula willistoni Meyer, 1885a, p. 462

Corbula nasuta Conrad, Harris, 1894b, p. 156 in part; not *C. nasuta* Conrad, 1833b, p. 38

Corbula (Caryocorbula) willistoni Meyer, Harris and Palmer, 1946, p. 116, pl. 24, figs. 22-25; Brann and Kent, 1960, p. 275

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); *Yazoo Co.*, Sims Siding, N. of Yazoo City. ARK.: *St. Francis Co.*, Crow Cr. LA.: *Caldwell Par.*, Wyatt's [sic] [Wyants] Bluff; *Ouachita R.*; *Catahoula Par.*, Danville Ldg., *Ouachita R.*

Types.—Syntypes, No. 75 GSATC

Caryocorbula willistoni arkansia Harris**Corbulidae**

Corbula nasuta Conrad, Harris, 1894b, p. 156 in part *vide* Harris; not *C. nasuta* Conrad, 1833b, p. 38

Corbula (Caryocorbula) willistoni var. *arkansia* Harris in Harris and Palmer, 1946, p. 116, pl. 24, figs. 26-28; Wilbert, 1953, pp. 99, 123 not *wieeistoni* [sic]; Brann and Kent, 1960, p. 275

Range.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

Localities.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type); *St. Francis Co.*, Crow Cr. LA.: *Vernon Par.*, Bayou Toro

Types.—Holotype, No. 4422; paratype, No. 4423 PRI

Caryocorbula sp.**Corbulidae**

Corbula (Caryocorbula) conradi Dall, Gardner, 1945, p. 133 in part, not pl. 9, figs. 13, 16. Texas localities only

Range.—Middle Eocene. Claiborne gr.

Localities.—TEXAS: *Webb Co.*; *Zapata Co.* (Gardner)

Type.—Specimens, unknown. Not at USNM

Caryocorbula sp.**Corbulidae**

Corbula (Caryocorbula) sp. Barry, 1942+, p. 75, pl. 10, fig. 4

Range.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

Locality.—LA.: *Sabine Par.*, ravine in center of NW. $\frac{1}{4}$ sec. 1, T. 9 N., R. 12 W. (This locality is about $\frac{1}{3}$ mi. E. of locality on Ferrell farm cited by Harris and Veatch, 1899, p. 72)

Type.—Figured specimen, No. 5029 LSU Pal. Mus.

Caryocorbula sp.**Corbulidae**

Corbula (Caryocorbula) sp. Gardner, 1935, p. 192, pl. 19, figs. 11, 12

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Medina Co.*, Hondo Cr., $\frac{1}{8}$ mi. below Elstone Cr.

Type.—Figured specimen, No. 370927 USNM

Caryocorbula sp. indet.**Corbulidae**

Corbula (Caryocorbula) sp. indet. Gardner, 1935, p. 194, pl. 19, fig. 6

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Ulvalde Co.*, Frio R., just above the trail leading down from the Evans' (Myrick's) apiary

Type.—Figured specimen, No. 370925 USNM

Ceronia singleyi Harris

See *Mesodesma singleyi* (Harris)

Chama gainesensis Harris

Chamidae

Chama gainesensis Harris, 1896, p. 66, pl. 6, figs. 4, 4a; Dall, 1903a, p. 1397; Brann and Kent, 1960, pp. 192, 193

Range.—Paleocene. Upper Midway gr. (type)

Locality.—GA.: *Clay Co.*, Fort Gaines, Chattahoochee R. (uppermost bed) (type)

Types.—Syntypes. Nos. 66, 67 PRI

Chama harrisi (Gardner)

Chamidae

Chama monroensis Aldrich, Harris, 1919, p. 130 in part, pl. 41, figs. 2, 3, not fig. 1; Brann and Kent, 1960, p. 193. Not *Chama monroensis* Aldrich, 1903, p. 100

Pseudochama harrisi Gardner, 1927, p. 372, figs. 43, 44

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, 8 mi. W. of Enterprise (type); Wautubbee

Type.—Holotype, No. 139451 USNM

Chama mississippiensis Conrad, Cossmann, 1893; Harris and Palmer, 1946; not Conrad, 1848a

See cf. *Chama* spp.

Chama monroensis Aldrich

Chamidae

Chama monroensis Aldrich, 1903, p. 100, pl. 4, fig. 15; Harris, 1919, p. 130 in part, pl. 41, fig. 1 copy Aldrich; not figs. 2, 3 = *C. harrisi* Gardner. Not Brann and Kent, 1960, p. 193

Range.—Middle Eocene. "*Ostrea sellaeformis* bed" (type), Cook Mt. fm., upper Claiborne gr.

Locality.—ALA.: *Monroe Co.*, "White Marl bed" (type)

Type.—Holotype, No. 639019 USNM

Chama monroensis Aldrich, Harris, 1919 not Aldrich, 1903

See *Chama harrisi* (Gardner)

Chama richardsi Harbison

Chamidae

Chama richardsi Harbison, 1944, p. 5, pl. 2, figs. 5, 6

Range.—Upper Eocene. Santee ls. (type), upper Claiborne gr.

Locality.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

Types.—Holotype and paratype, No. 16410 ANSP

Chama sp.

Chamidae

Chama mississippiensis Conrad ?, Harris and Palmer, 1946, p. 92, pl. 20, figs. 14, 15; Brann and Kent, 1960, p. 193; probably not *C. mississippiensis* Conrad, 1848a, p. 294

¹
Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.
Locality.—LA.: *Grant Par.*, Montgomery, Red R.
Type.—Figured specimen, No. 4341 PRI

Chama sp.**Chamidae**

Chama mississippiensis Conrad, Cossmann, 1893, p. 11, not *Chama mississippiensis* Conrad, 1848a, p. 294 (Oligocene)

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—MISS.: *Clarke Co.*, Wautubbee

Type.—Unfigured specimen, No. 9885, Lab. Géol., Sorbonne, Paris

Chama sp. Harris, 1919

See *Pseudochama sp.*

Chama sp. a**Chamidae**

Chama sp. a Kellum, 1926, p. 23, pl. 3, fig. 5

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Locality.—N. C.: *New Hanover Co.*, Wilmington

Type.—Figured specimen, No. 353260 USNM

Chama sp. b**Chamidae**

Chama sp. b Kellum, 1926, p. 23, pl. 3, fig. 6

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Localities.—N. C.: *New Hanover Co.*, Wilmington; *Pender Co.*, Old Rocky Pt.

Type.—Figured specimen, No. 353248 USNM

Chlamys anatypes (Morton)

See *Flexopecten anatypes* (Morton)

Chlamys beverlyi Tucker [Rowland]**Pectinidae**

Pecten (Chlamys) gilbertharrisi Tucker [-Rowland], 1931, p. 243 in part, pl. 1, fig. 1. Not *P. gilbertharrisi* F. and H. Hodson, 1927, p. 28

Chlamys (Chlamys) beverlyi Tucker [-Rowland], 1934, p. 614; Tucker-Rowland, 1936b, p. 997, pl. 8, figs. 7, 8

Pecten (Chlamys) beverlyi Tucker, Harris and Palmer, 1946, p. 30, pl. 8, figs. 1-5; Brann and Kent, 1960, p. 656

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. Not Jackson Eocene as originally stated.

Localities.—ALA.: *Monroe Co.*, Lisbon, Alabama R. (type).

TEXAS: *Sabine Co.*, Sabine R. not "below Robinsons Ferry" = Jackson Eocene. Exact locality not known, see Veatch Survey, 1902, p. 129

Original data of this species are incorrect in stating Lisbon, Ala., as Jackson Eocene. If the Sabine R. specimen were from a Jackson Eocene locality then the original description contains two forms.

Type.—Holotype, presumably CNHM

Chlamys biddleana (Kellum)**Pectinidae**

Pecten biddleana Kellum, 1926, p. 20, pl. 2, fig. 4; Harbison, 1944, p. 3, pl. 1, fig. 5

Chlamys (Chlamys) biddleana (Kellum), Tucker-Rowland, 1936b, p. 1002, pl. 9, fig. 2

Range.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Castle Hayne ls. (type), Jackson gr.

Localities.—S. C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: *Jones Co.*, Pollokville; *Craven Co.*, Biddle Ldg., Neuse R. (type)

Type.—Holotype, No. 353236 USNM

Chlamys burlesonensis (Harris)

Pectinidae

Pecten Deshayesii Lea, Heilprin, 1891a, p. 403; Kennedy, 1895, pp. 114, 118, 131. Not Lea 1833, p. 87 *vide* Harris, 1919

Pecten (Chlamys) clarkeanus Aldrich, Dall, 1898b, p. 739 in part

Pecten (clarkeanus ? var.) burlesonensis Harris, 1919, p. 26, pl. 14, figs. 11-13; Brann and Kent, 1960, p. 659

Pecten burlesonensis Harris, Renick and Stenzel, 1931, pp. 87, 108, pl. 6, figs. 1, 2

Chlamys (Chlamys) clarkeanus (Aldrich), Tucker-Rowland, 1936b, p. 990 in part

Chlamys burlesonensis (Harris), Gardner, 1945, p. 64 in part

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr., Stenzel, 1939, p. 807

Localities.—TEXAS: NE. *Burleson Co.*, Burleson Shell Bluff, Brazos R. (type), (Collier's Ferry or Black Bluff shoals); *Bastrop Co.*, Smithville, Colorado R.

Types.—Syntypes, Harris, pl. 14, fig. 11 USNM; Harris, pl. 14, fig. 13 lost; Harris, pl. 14, fig. 12 PRI lost prior to 1937

Chlamys cainei (Harris)

Pectinidae

Pecten willcoxi cainei Harris, 1919, p. 24, pl. 14, fig. 8

Chlamys (Chlamys) cainei (Harris), Tucker-Rowland, 1936b, p. 987 as *caini*, pl. 5, fig. 11 holotype

Pecten wautubbeanus cainei Harris, Brann and Kent, 1960, p. 672

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, Wautubbee (type); *Newton Co.*, Hickory

Type.—Holotype, No. 438 PRI

Chlamys cawcawensis (Harris)

Pectinidae

Pecten cawcawensis Harris, 1919, p. 27, pl. 15 not 16 as in text figs. 1-7; Brann and Kent, 1960, p. 658

Chlamys (Chlamys) cacawensis [sic] (Harris), Tucker-Rowland, 1936b, p. 996, pl. 5, figs. 12-14 syntypes, fig. 15

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

Localities.—S.C.: *Orangeburg Co.*, near Cawcaw Swamp, Columbia Rd., 17 mi. N. of Orangeburg (type). N. C.: *Craven Co.*, above New Bern, Neuse R. GA.: *Sumter or Dooly Co.*, USNM cat. loc. 5205 Flint R., old Danville Ferry, 16 ½ mi. E. of Americus. ALA.: *Monroe Co.*, Claiborne ?

Types.—Syntypes, Nos. 441-447 PRI

Chlamys choctavensis (Aldrich)**Pectinidae**

Pecten choctavensis Aldrich, 1895b, p. 16, pl. 5, fig. 7

Chlamys choctavensis (Aldrich), Harris, 1897b, p. 46, pl. 7, fig. 6; Brann and Kent, 1960, p. 208

Pecten (Aequipecten ?) choctavensis Aldrich, Dall, 1898b, p. 733

Pecten choctavensis Aldrich, Clark and Martin, 1901, p. 188 in part, pl. 44, figs. 4-6

Aequipecten choctavensis (Aldrich), Teppner, 1922, p. 148

Pecten (Chlamys) choctavensis Aldrich, Shimer and Shrock, 1944, p. 407, pl. 161, figs. 17, 18 copy Clark and Martin

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Nanjemoy fm. (Clark and Martin)

Localities.—ALA.: Clarke Co., Choctaw Corner (type); Woods Bluff, Tombigbee R. MD.: Charles Co., Popes Cr.; 1 ½ mi. above Popes Cr.; Prince Georges Co. (Clark and Martin)

Type.—Holotype, No. 638957 USNM

Chlamys clarkeana (Aldrich)**Pectinidae**

Pecten clarkeanus Aldrich, 1895b, p. 16, pl. 5, fig. 11; Harris, 1919, p. 25 in part, pl. 15, figs. 8, 9, 13; Brann and Kent, 1960, p. 659, No. 451 (only); Nos. 448-450=*Eburneopecten hamiltonensis* (Tucker)

Pecten (Chlamys) clarkeanus Aldrich, Dall, 1898b, p. 739 in part

Chlamys clarkeana (Aldrich), Teppner, 1922, p. 104 not Harris as in reference

Chlamys (Chlamys) clarkeanus (Aldrich), Tucker-Rowland, 1936b, p. 990 in part, pl. 5, fig. 1; pl. 7, fig. 6; pl. 10, figs. 5, 12

Range.—Middle Eocene. Cook Mt. fm. (type), middle Claiborne gr.

Localities.—ALA.: Choctaw Co., Sowilpa Cr. (type) [Souwilpa Cr.]; Monroe Co., Hamilton Bluff, Alabama R.; Lisbon Bluff, Alabama R.

Type.—Holotype, No. 638958 USNM

Chlamys (Chlamys) clarkeanus (Aldrich)

See *Chlamys burlesonensis* (Harris)

See also *Chlamys clarkeana* (Aldrich)

Chlamys cocoana Dall**Pectinidae**

Pecten (Chlamys) cocoanus Dall, 1898b, p. 738, pl. 34, fig. 23; Schuchert, et al., 1905, p. 486

Chlamys cocoana Dall, Teppner, 1922, p. 104 not Eocene as indicated

Chlamys (Chlamys) cocoanus Dall, Tucker-Rowland, 1936b, p. 1001, pl. 7, figs. 7, 8 paragraph "Specimens . . . *Lyropecten*" should be under *C. anatis*

Pecten (Chlamys) cocoanus Dall, Harris and Palmer, 1946, p. 32, pl. 8, fig. 10 copy Dall

Range.—Oligocene. Red Bluff horizon. See Cooke and MacNeil, 1952, p. 27

Localities.—ALA.: Choctaw Co., Cocoa P. O. (type). MISS.: Wayne Co., Red Bluff [Hiwanee Station], Chickasawhay R.

Type.—Holotype, No. 141025 USNM

Chlamys cookei (Kellum)**Pectinidae**

Pecten cookei Kellum, 1926, p. 20, pl. 2, figs. 2-3; Richards, 1950, p. 18

Chlamys (Chlamys) cookei (Kellum), Tucker-Rowland, 1936b, p. 1000, pl. 7, fig. 5; pl. 9, fig. 5

Range.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.
Localities.—N.C.: *Duplin Co.*, 3 ["2"] miles S. of Magnolia (type); 2 mi. S. of Kornegay; *Pitt Co.*, 3 mi. E. of Quinerly; *Wayne Co.*, Broadhurst Bridge. For additional localities see Kellum, 1926, Tucker-Rowland, 1936
Type.—Holotype, No. 353235 USNM

Chlamys corvina* Harris*Pectinidae**

Pecten (Chlamys) corvinus Harris in Harris and Palmer, 1946, p. 31, pl. 8, fig. 6; Brann and Kent, 1960, p. 661

Range.—Upper Eocene. Cf. Upper Jackson gr. (type)
Locality.—ARK.: *St. Francis Co.*, Crow Cr. near Forrest City (type)
Type.—Holotype, No. 4171 PRI

Chlamys cushmani* (Kellum)*Pectinidae**

Pecten cushmani Kellum, 1926, p. 20, pl. 2, fig. 1

Chlamys (Chlamys) cushmani (Kellum), Tucker-Rowland, 1936b, p. 999, pl. 9, fig. 1 holotype

Range.—Upper Eocene. Castle Hayne ls. (type) Jackson gr.
Localities.—N.C.: *Pitt or Craven Co.* [station located at boundary], 3 mi. E. of Quinerly (type); *Pitt Co.*, Quinerly Bridge; *Pender Co.*, 3 mi. NE. of Maple Hill
Type.—Holotype, No. 353314 USNM

Chlamys danvillensis* Weisbord in Tucker-Rowland*Pectinidae**

Pecten (Chlamys) danvillensis Weisbord ms.

Chlamys (Chlamys) danvillensis Weisbord, Tucker-Rowland, 1936b, p. 999, pl. 6, figs. 4, 6, 12

Pecten (Chlamys) danvillensis Weisbord, Harris and Palmer, 1946, p. 31, pl. 8, figs. 7-9; Brann and Kent, 1960, p. 661

Range.—Upper Eocene. Danville Ldg. beds (type), uppermost Jackson gr.

Localities.—LA.: *Catahoula Par.*, Danville Ldg., Ouachita R. (type); *Winn Par.*, Tullus

Type.—Syntype (1), No. 4173 PRI (other "not returned")

Chlamys deshayesii* (Lea)*Pectinidae**

Pecten Deshayesii Lea, 1833, p. 87, pl. 3, fig. 66 *Deshaysii* [sic]; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 393; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Heilprin, 1882a, p. 417; Heilprin, 1884b, p. 86; de Gregorio, 1890, pp. 180, 181, pl. 21, fig. 12 copy *lyelli*, fig. 13 copy *deshayesii*, fig. 14; Harris, 1895b, p. 16; Harris, 1919, p. 19, pl. 13, figs. 2-7 [as *deshayesii*]; Brann and Kent, 1960, p. 662. Not *P. deshayesi* Nyst, 1836, p. 15; Nyst, 1845, p. 288

Pecten Lyelli Lea 1833, p. 88, pl. 3, fig. 67; Conrad, App. in Morton, 1834, p. 6 = *P. Deshayesii* Lea; H. C. Lea, 1849, p. 103; de Gregorio, 1890, p. 180; Harris, 1895b, p. 26; Harris, 1919, pp. 19-21

? *Pecten minutus* Lea, 1833, p. 88 *nomen nudum*

Pecten Deshayesii tirmus de Gregorio, 1890, p. 181, pl. 21, fig. 15; Harris, 1919, p. 21 not p. 23

Chlamys Deshayesii (Lea), Cossmann, 1893, p. 18; Dall, 1898b, p. 737 in part; Richards, 1950, p. 18, in part

Aequipecten Deshayesii (Lea), Teppner, 1922, p. 151

? *Pecten* (*Chlamys*) *deshayesii* Lea, Kellum, 1926, p. 19

Chlamys (*Chlamys*) *deshayesi* [sic] *tirmus* (de Gregorio), Tucker-Rowland, 1936b, p. 995 in part, not pl. 10, fig. 10

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Holotype, No. 5425 ANSP. Holotype, *P. lyelli*, No. 5426 ANSP

***Chlamys deshayesii dennisoni* Tucker [Rowland]**

Pectinidae

Pecten deshayesii Lea "var." Harris, 1919, p. 19, pl. 13, fig. 1; Brann and Kent, 1960, p. 662

Chlamys (*Chlamys*) *deshayesi* [sic] *dennisoni* Tucker [Rowland], 1934, p. 613, pl. 26, fig. 1 holotype; Tucker-Rowland, 1936b, p. 995, pl. 5, fig. 6 holotype; Brann and Kent, 1960, p. 209 as *deshayesii*

Range.—Upper Eocene. *Scutella* bed (type), lower Jackson gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff "*Scutella*" layer just above the "sand" (type)

Type.—Holotype, No. 426 PRI

***Chlamys dysoni* Tucker-Rowland**

Pectinidae

Chlamys (*Lyropecten*) *dysoni* Tucker-Rowland, 1938, p. 5, pl. 4, fig. 9

Range.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

Locality.—FLA.: Marion Co., "near Ocala" (type)

Type.—Holotype. Presumably CNHM

***Chlamys greggi* Harris**

Pectinidae

? *Pecten Deshayesii* Lea, Aldrich, 1886, p. 57; not *P. Deshayesii* Lea, 1833, p. 87

Chlamys greggi Harris, 1897b, p. 45, pl. 7, figs. 4, 5; Teppner, 1922, p. 107; Brann and Kent, 1960, p. 209

Pecten (*Chlamys*) *greggi* Harris, Dall, 1898b, p. 738; Shimer and Shrock, 1944, p. 407

Chlamys (*Chlamys*) *greggi* Harris, Tucker-Rowland, 1936b, p. 987, pl. 6, fig. 10; pl. 10, fig. 4

Range.—Lower Eocene, Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type), Bells Ldg., Alabama R.; Wilcox Co., Yellow Bluff, Alabama R.; Lower Peach Tree Ldg., Alabama R. GA.: Clay Co., Fort Gaines

Types.—Syntypes, Nos. 188, 189 PRI

***Chlamys incertae* Tucker-Rowland**

Pectinidae

Chlamys (*Lyropecten*) *incertae* Tucker-Rowland, 1938, p. 6, pl. 5, fig. 3

Range.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

Locality.—FLA.: Marion Co., "near Ocala" (type)

Type.—? Holotype, No. UC 51872 CNHM

***Chlamys indecisa* Dall**

Pectinidae

Pecten (*Chlamys*) *indecisus* Dall, 1898b, p. 744, pl. 34, fig. 3; Schuchert, et al., 1905, p. 488 wrong locality

Pecten indecisis Dall, Cooke, 1916, p. 110

Chlamys indecisa Dall, Teppner, 1922, p. 110 not Oligocene as indicated

Chlamys (Chlamys) indecisis Dall, Tucker [Rowland], 1936b, p. 1002, pl. 6, figs. 1, 3, 2 holotype.

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—FLA.: *Alachua Co.*, Archer (type); *Marion Co.*, Martin Station (Dall).

Not remainder of localities of Dall nor "Caloosahatchee R., Fort Thompson Florida" as in Schuchert, *et al.*, 1905.

Type.—Holotype, No. 107754 USNM labelled

***Chlamys johnsoni* (Clark)**

Pectinidae

Pecten johnsoni Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 3a, b; Dall, 1898b, pp. 736, 737; Clark and Martin, 1901, p. 189, pl. 44, figs. 8, 8a holotype

Chlamys (Chlamys) johnsoni (Clark), Tucker-Rowland, 1936b, p. 989, pl. 10, fig. 1 holotype

Pecten (Chlamys) johnsoni Clark, Shimer and Shrock, 1944, p. 407

Range.—Paleocene. Aquia fm. (type). Lower Eocene. Nanjemoy fm. (Clark and Martin)

Localities.—VA.: *Stafford Co.*, Potomac Cr. (type); *King George Co.*, 2 mi. below Potomac Cr.; Woodstock; mouth of Paspotansa Cr. (Clark and Martin)

Types.—Syntypes, USNM

***Chlamys kneiskerni* (Conrad)**

Pectinidae

Pecten Kneiskerni Conrad, 1869b, p. 40, pl. 1, fig. 18; Heilprin, 1882a, p. 417; Whitfield, 1885, p. 224 in part, not pl. 29, fig. 3 not "type", not 4, 5; Whitfield, 1899, p. 163

Pecten (Chlamys) Kneiskerni Conrad, Dall, 1898b, p. 735 in part

Chlamys Kneiskerni (Conrad), Teppner, 1922, p. 112 not Oligocene as indicated

Chlamys (Chlamys) kneiskerni (Conrad), Tucker-Rowland, 1936b, p. 996, pl. 10, fig. 9 holotype

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N. J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, Rutgers Univ. 1899 not 1962 *vide* Rutgers

***Chlamys membranosa* (Morton)**

Pectinidae

Pecten membranosus Morton, 1833b, p. 130, pl. 10, fig. 4; Morton, 1834, p. 59, pl. 10, fig. 4 external; Conrad, 1842b, p. 174; Hodge, 1843, p. 97; Gibbs, 1845, p. 254; d'Orbigny, 1850, p. 253; Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Heilprin, 1881a, p. 158; Heilprin, 1882a, 417; Meyer, 1885b, p. 68; de Gregorio, 1890, p. 183

Pecten Carolinensis Conrad, App. in Kerr, 1875, p. 18, pl. 3, fig. 2 not *Liropecten [sic] Carolinensis* Conrad, App. in Kerr, 1875, p. 18 Miocene

Pecten (Chlamys) membranosus Morton, Dall, 1898b, p. 736

Chlamys membranosa (Morton), Teppner, 1922, p. 114

Cf. *Pecten (Chlamys) membranosus* Morton, Kellum, 1926, p. 19; Harbison, 1944, p. 3, pl. 1, fig. 7

Chlamys (Chlamys) membranosus (Morton), Tucker-Rowland, 1936b, p. 998, pl. 9, figs. 7, 8; pl. 10, fig. 11 holotype internal

Cf. *Pecten membranosus* Morton, Richards, 1948, p. 4, pl. 1, fig. 4; Richards, 1950, p. 15, fig. 63d

Range.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

Localities.—S. C.: "calcareous strata of South Carolina" (type).

See Harbison. Cf. N.C.: *Jones Co.*, 2 ½ mi. W. of Dover; *New Hanover Co.*, 3 ½ mi. NW. of Wrightsboro; Wilmington; *Harnett Co.*, 4 mi. NE. of Spout Springs; *Pender Co.*, Old Rocky Point quarry; Castle Hayne quarry; Northeast Cape Fear R., 3 ½ mi. above Castle Hayne Bridge; 3 mi. NE. of Rose Hill. For further localities see Kellum, 1926, Richards, 1948, 1950

Type.—Holotype, No. 12574 ANSP

***Chlamys nupera* (Conrad)**

Pectinidae

Pecten nuperus Conrad in Wailes 1854, p. 289, pl. 14, fig. 11 [*as nuperum*] (reprint, 1939, p. 19, pl. 1, fig. 11); Conrad, 1856a, p. 259 (reprint 1939, p. 5); Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Hopkins, 1871, p. 12; Heilprin, 1882a, p. 417; Meyer, 1885a, p. 459 not "Heilprin, Acad. Nat. Sci." as in Tucker-Rowland, 1936b, p. 1000; Meyer, 1885c, p. 425; Langdon, 1886, p. 202; Vaughan, 1896, p. 50

Pecten (Chlamys) nuperus Conrad, Dall, 1898b, p. 739; Harris and Palmer, 1946, p. 29, pl. 7, figs. 1-4; Brann and Kent, 1960, p. 666

Chlamys nupera (Conrad), Teppner, 1922, p. 119; Brann and Kent, 1960, p. 211

Chlamys (Chlamys) nuperus (Conrad), Tucker-Rowland, 1936b, p. 1000, pl. 10, fig. 6

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery, Red R. GA.: *Decatur Co.*, Russell Springs. FLA.: *Alachua Co.*, Arredondo

Type.—Holotype, No. 13185 ANSP Moore, 1962, p. 80

***Chlamys perplana* of authors [*Pecten perplanus*]**

Pectinidae

Not *Pecten perplanus* Morton, 1833a, p. 293, pl. 5, fig. 5; Morton, 1834, p. 58, pl. 5, fig. 5; pl. 15, fig. 8

Not *Pecten Spillmani* Gabb, 1860d, p. 402, pl. 68, fig. 3; Conrad, 1865a, p. 14

Not *Pecten (Aequipecten) perplanus* Morton, Dall, 1898b, p. 732 in part; Tucker-Rowland, 1938, p. 29, pl. 6, fig. 12 as *Chlamys*

Not *Pecten perplanus* Morton, Hopkins, 1917, p. 296, pl. 27, figs. 4, 4a; Cooke, 1926a, pl. 96, fig. 5

See Harris in Harris and Palmer, 1946, pp. 27, 28

From Eocene and Oligocene localities of numerous authors.

Chlamys (Aequipecten) perplanus (Morton), Tucker-Rowland, 1938
See *Chlamys spillmani* (Gabb)

Chlamys (Aequipecten) perplanus centrotus (Dall)
See *Aequipecten perplanus centrotus* (Dall)

***Chlamys pulchricosta* (Meyer and Aldrich)**

Pectinidae

Pecten pulchricosta Meyer and Aldrich, 1886, p. 45, pl. 2, figs. 23, 23a; Harris, 1919, p. 24, pl. 14, figs. 9, 10; Brann and Kent, 1960, pp. 667, 668

Pecten (Nodipecten) pulchricosta Meyer and Aldrich, Dall, 1898b, p. 730

Aequipecten (Nodipecten) pulchricostus (Meyer and Aldrich), Tappner, 1922, p. 205

Chlamys (Lyropecten) pulchricostata [sic] "Aldrich and Meyer" [sic] [Meyer and Aldrich], Tucker-Rowland, 1938, p. 6, pl. 4, fig. 11 holotype, pl. 6, fig. 2

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., Wautubbee (type)

Type.—Holotype, No. 638745 USNM

Chlamys rigbyi (Whitfield)

Pectinidae

Pecten Rigbyi Whitfield, 1885, p. 226, pl. 29, fig. 6; Dall, 1898b, p. 736; Whitfield, 1899, p. 163

Chlamys (Chlamys) rigbyi (Whitfield), Tucker-Rowland, 1936b, p. 986, pl. 10, fig. 7 holotype

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: Monmouth Co., "upper layer of Upper Marls, Shark R." (type)

Type.—Holotype, No. 9716 AMNH. Not found 1962

Chlamys scintillatus (Conrad)

See *Eburneopecten scintillatus* (Conrad)

Chlamys seabeensis (Richards)

Pectinidae

Pecten seabeensis Richards, 1947, p. 34, pl. 12, fig. 18

Range.—Eocene. "Pamunkey" (type)=Paleocene or lower Eocene.

Locality.—VA.: York Co., Camp Peary, depth 380 ft., (Seabee Base) (type)

Type.—Holotype, No. 16781 ANSP

Chlamys sheldoniae Tucker

Pectinidae

Chlamys (Chlamys) sheldoniae Tucker, 1934, p. 614, pl. 27, fig. 2; Tucker-Rowland, 1936b, p. 988, pl. 6, figs. 5, 8 holotype

Range.—Paleocene. Aquia fm. (type)

Locality.—MD.: Prince Georges Co., Fort Washington (type)

Type.—Holotype, probably CNHM [not PRI]

Chlamys spillmani (Gabb)

Pectinidae

Pecten spillmani Gabb, 1860d, p. 402, pl. 68, fig. 3; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; de Gregorio, 1890, p. 182

Pecten perplanus Morton, Heilprin, 1882a, p. 417; Cooke, 1926a, pl. 96 fig. 5; Semmes, 1929, p. 272, fig. 62-5

Pecten (Aequipecten) perplanus Morton, Dall, 1898b, p. 732; Shimer and Shrock, 1944, p. 407

Chlamys (Aequipecten) perplanus (Morton), Tucker-Rowland, 1938, p. 29, pl. 6, fig. 12

Pecten (Chlamys) spillmani Gabb, Harris and Palmer, 1946, p. 27, pl. 6, figs. 3-8; Brann and Kent, 1960, p. 671

Cf. *Chlamys spillmani* (Gabb), Harris, 1951, p. 9 in part, pl. 5, figs. 1, 1'; Brann and Kent, 1960, p. 211

Range.—Eocene. Upper Jackson gr.

Localities.—MISS.: Clarke Co., Shubuta. ALA.: (type). FLA.: Marion Co., E. of Kendrick; 6 mi. SW. of Ocala; Dixie Lime Products Co., Reddick. GA.: Houston Co., 2.9 mi. S. of Perry, Plant 2, Clinchfield Quarry; Georgia Lime Rock Quarry about 4 mi. from Perry (Harris)

Type.—Holotype, ANSP

***Chlamys spillmani* (Gabb) "vars."**

Pectinidae

Chlamys spillmani (Gabb) "vars." Harris, 1951, p. 9, pl. 4, figs. 1-3; Brann and Kent, 1960, p. 211

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Localities.—FLA.: Marion Co., Florida Lime Products Co., about 6 mi. SW. of Ocala. GA.: Houston Co., Georgia Lime Rock quarry about 4 mi. from Perry

Types.—Figured specimens, Nos. 24447-24449 PRI

***Chlamys spillmani clinchfieldensis* Harris**

Pectinidae

Chlamys spillmani clinchfieldensis Harris, 1951, p. 10, pl. 4, figs. 4-7; Brann and Kent, 1960, pp. 211, 212

Range.—Upper Eocene. "Ocala ls.", (type), Ocala gr.

Locality.—GA.: Houston Co., Pennsylvania Cement Corp., plant 2, Clinchfield quarry (type)

Types.—Holotype, No. 24450; paratype, No. 24451 PRI

***Chlamys trentensis* (Harris)**

Pectinidae

Pecten trentensis Harris in Van Winkle and Harris, 1919, p. 15, pl. 2, figs. 8, 9; Kellum, 1926, p. 35; Richards, 1943, p. 519, pl. 34, figs. 12, 25; Brann and Kent, 1960, p. 671

Chlamys (Chlamys) trentensis (Harris), Tucker-Rowland, 1936b, p. 1005, pl. 10, fig. 8; Brann and Kent, 1960, p. 212

Range.—Post-Eocene

Locality.—N. C.: Jones Co., rt. bank Trent R., 6 mi. below Pollocksville ["Polloksville"] (type)

Types.—Syntypes, Nos. 1407, 1408 PRI

***Chlamys wahtubbeana* Dall**

Pectinidae

Pecten (Chlamys) wahtubbeanus Dall, 1898b, p. 736, pl. 34, fig. 9; Schuchert, et al., 1905, p. 491

Pecten wahtubbeanus Dall, Harris, 1919, p. 21, pl. 14, figs. 1-4; Brann and Kent, 1960, p. 672

Pecten wahtubbeanus tirmus de Gregorio, Harris, 1919, p. 23, (not p. 21), pl. 14, fig. 5 as var. base of Claiborne Bluff; Brann and Kent, 1960, p. 672 as var.

Chlamys wahtubbeana Dall, Teppner, 1922, p. 129

Chlamys (Chlamys) wahtubbeanus Dall, Tucker-Rowland, 1936b, p. 992, pl. 5, figs. 7-9; pl. 9, fig. 4 holotype

Chlamys (Chlamys) dehayesi [sic] *tirmus* (de Gregorio), Tucker-Rowland, 1936b, p. 995 in part, pl. 10, fig. 10, same specimen as Harris, 1919, base of Claiborne Bluff

Pecten (Chlamys) wahtubbeanus Dall, Shimer and Shrock, 1944, p. 407

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, Wautubbee; *Newton Co.*, Hickory; 8 mi. W. of Enterprise; Indian Mound R.R. cut (type) *fide* Schuchert, *et al.*, 1905, p. 491. ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R.; *Clarke Co.*, Coffeeville. LA.: *Winn Par.*, St. Maurice; *Sabine Par.*, Simpkins place, 3 mi. SE. of Nereet

Type.—Holotype, No. 137612 USNM

***Chlamys wautubbeana willcoxi* (Dall)**

Pectinidae

Pecten (*wautubbeanus* var. ?) *Willcoxi* Dall, 1898b, p. 737, pl. 29, fig. 4 as *Pecten Willcoxi*; Schuchert, *et al.*, 1905, p. 491

Pecten (*wautubbeanus* var. ?) *willcoxi* Dall, Harris, 1919, p. 23, pl. 14, figs. 6, 7

Chlamys Willcoxi (Dall), Teppner, 1922, p. 130

Chlamys (*Chlamys*) *wautubbeanus willcoxi* (Dall), Tucker-Rowland, 1936b, p. 993, pl. 5, fig. 10; pl. 10, fig. 2 holotype

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: "Eocene of Clarke Co. . . . and of the Wautubbee hills (Claibornian); Johnson and Burns"—Dall; *Clarke Co.*, McLeod's mill (type) *fide* Schuchert, *et al.*, 1905, p. 491

Type.—Holotype, No. 140126 USNM

***Chlamys* sp.**

Pectinidae

Pecten sp. Harris, 1919, p. 20, pl. 13, fig. 8; Brann and Kent, 1960, p. 670

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R.

Type.—Figured specimen, No. 433 PRI

***Chlamys* sp.**

Pectinidae

Pecten sp. Clark, 1895, p. 5; Clark, 1896, p. 86, pl. 34, fig. 4; Clark and Martin, 1901, p. 190, pl. 44, figs. 9, 9a

Range.—Paleocene. Aquia fm.

Locality.—VA.: *Stafford Co.*, Potomac Cr.

Type.—Figured specimen, USNM

***Chlamys* sp.**

Pectinidae

Chlamys sp. Harris, 1951, pl. 4, figs. 8, 9; Brann and Kent, 1960, p. 211

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: *Alachua Co.*, Ocala Lime Rock Corp., 3.5 mi. SE. of Newberry, about 17 mi. W. of Gainesville

Type.—Figured specimen, No. 24452 PRI

Cibota mississippiensis (Conrad)

See *Barbatia* (*Barbatia*) *uxorispalmeri* Stenzel and Krause

Claibornites rotundus (Lea)

See *Epilucina rotunda* (Lea)

Clementia mercenaroidea (Aldrich)

See ? *Mercimonia mercenaroidea* (Aldrich)

Coralliophaga bryani Clark

See *Oryctomya bryani* (Clark)

Coralliophaga (Oryctomya) claibornensis Dall
See *Oryctomya claibornensis* Dall

Coralliophaga prima Harris
See cf. *Oryctomya prima* (Harris)

Corbicula ? cornelliana Harris

Corbiculidae

Corbicula ? cornelliana Harris, 1897b, p. 65, pl. 13, fig. 3; Dall, 1903a, p. 1451; Henderson, 1935, pp. 10, 38, 113; Brann and Kent, 1960, p. 252

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

Type.—Holotype, No. 171 PRI

Corbicula texana Gardner

Corbiculidae

Corbicula texana Gardner, 1935, p. 154, pl. 8, figs. 6, 7

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: Uvalde Co., Schuddemagen ranch, 11 mi. S. of Sabinal, a few hundred yds. S. of junc. of Elm Cr. with Sabinal Cr., USGS Sta. 6279 (type); Medina Co., D'Hanis-Yancey rd. about 7½ mi. E. of S. of D'Hanis

Type.—Holotype, No. 370930, USNM

Corbis claibornensis Dall

See *Corbis lirata* (Conrad)

Corbis distans Conrad

See *Corbis undata* Conrad

Corbis lamellosa Lamarck, Conrad, 1833c. Not Lamarck, 1818

See *Corbis lirata* (Conrad)

Corbis lirata (Conrad)

Fimbridiidae

Corbis lamellosa Lamarck, Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67, pl. 19, fig. 5); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 401, pl. 4, fig. 16; H. C. Lea, 1849, p. 98; Tuomey, 1858, p. 265; Harris, 1895b, p. 25 = *Gafrarium liratum* Conrad. Not *C. lamellosa* Lamarck, 1818, p. 537, not p. 587 as in Conrad

Gafrarium liratum Conrad, 1865a, p. 9 new name for *Corbis lamellosa* Conrad, 1833c, p. 41, not *C. lamellosa* Lamarck; Conrad, 1866a, p. 6; Harris, 1895b, p. 25. Not *Lucina lirata* Phillips, 1829, p. 140 name and figure only. Not *Lucina lyrata* Phil. in D'Archiac, 1843, p. 372

Corbis (Gafrarium) lirata Conrad, Heilprin, 1884b, p. 87

Corbis lirata (Conrad), de Gregorio, 1890, p. 209, pl. 30, fig. 13 copy Conrad

Corbis claibornensis Dall, 1903a, p. 1393 new name for *Corbis lirata* Conrad [not necessary]; Harris, 1919, p. 123, pl. 40, figs. 3, 4, 4a; Brann and Kent, 1960, p. 253

Fimbria claibornensis (Dall), Richards and Palmer, 1953, p. 50

The new name of *C. claibornensis* was given by Dall because he thought the name *Corbis lirata* Conrad was preoccupied by a "*Corbis lirata* d'Archiac". The species was *Lucina lirata* Phillips in D'Archiac. Hence the new name was not necessary.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Unknown. Not listed in Moore, 1962

Corbis undata Conrad

Fimbriidea

Corbis undata Conrad, 1833c, p. 41, (Harris reprint, 1893, p. 67, pl. 19, fig. 6); Conrad, App. in Morton, 1834, p. 7 as *C. undulata*; Conrad, 1846c, p. 401, pl. 4, fig. 11; H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 387; Harris, 1895b, p. 47; Dall, 1903a, p. 1392; Harris, 1919, p. 124, pl. 40, fig. 5; Brann and Kent, 1960, p. 253

Corbis distans Conrad, 1833c, p. 41, (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 401 (=young *C. undata*); H. C. Lea, 1849, p. 98; d'Orbigny, 1850, p. 387; de Gregorio, 1890, p. 209, pl. 30, fig. 10 copy Conrad; Cossmann, 1893, p. 11; Harris, 1895b, p. 16 (= *C. undata* Conrad)

Gafrarium distans (Conrad), Conrad, 1865a, p. 9; Conrad, 1866a, p. 6

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Missing ANSP Moore, 1962, p. 106; *Corbis distans* Conrad probable syntypes (3), Nos. 30505, 30506 ANSP Moore, 1962, p. 55

Corbis undulata Conrad, App. in Morton, 1834, p. 7 *nomen nudum*, probably error for *C. undata* Conrad, which see

Corbula Alabamensis Owen

See *Caryocorbula willistoni* (Meyer)

Corbula Alabamiensis Lea

See *Caryocorbula alabamiensis* (Lea)

Corbula alabamiensis Lea, Price and Palmer, 1928; Renick and Stenzel, 1931. Not Lea, 1833

See *Caryocorbula deussenii* (Gardner)

Corbula alabamiensis Lea "var." Harris, 1897b

See *Corbula subengonata* Dall

Corbula alabamiensis Lea "var." Vaughan, 1896; Harris, 1919

See *Caryocorbula deussenii* (Gardner)

Corbula alabamiensis citronella Harris

See *Caryocorbula alabamiensis citronella* (Harris)

Corbula alabamiensis ? gregorioi Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

Corbula alabamiensis var. *ima* de Gregorio

See *Caryocorbula alabamiensis* variation "*ima*" de Gregorio

Corbula alabamiensis var. *tecla* de Gregorio

See *Caryocorbula alabamiensis* variation "*tecla*" de Gregorio

Corbula aldrichi Meyer

See *Vokesula aldrichi* (Meyer)

Corbula aldrichi smithvillensis Harris

See *Vokesula smithvillensis smithvillensis* (Harris)

Corbula aliformis Conrad**Corbulidae**

Corbula alta Conrad, 1850, p. 41 expl. of pl. only, pl. 1, fig. 3. Not
C. alta Conrad, 1848b, p. 124, pl. 12, figs. 33-35, Vicksburg
Corbula aliformis Conrad, 1866a, p. 20 not "Miss."; Conrad, 1866b,
 p. 76

Range.—Eocene. "Shell Bluff gr."

Locality.—"GA." Coll. J. Hamilton Couper, Conrad, 1850, p. 39

Type.—Missing, Moore, 1962, p. 35

Corbula alta Conrad, 1850 not Conrad, 1848b

See *Corbula aliformis* Conrad

Corbula (Nearea) alternata Aldrich

See *Cuspidaria attenuata* (Aldrich)

Corbula ? (Tiza) amara de Gregorio**Corbulidae**

Corbula ? (Tiza) amara de Gregorio, 1890, p. 234, pl. 37, figs. 12-14,
 age doubtful not Claiborne, Ala.; Harris, 1919, p. 200 based on
Corbula alta Conrad, Vicksburg Oligocene
 A doubtful Gosport sd. species.

Type.—Formerly De Gregorio Coll. Univ. Palermo, Palermo,
 Sicily. Lost

Corbula (Caryocorbula) augustae Gardner

See *Caryocorbula augustae* Gardner

Corbula bicarinata Conrad

See *Caestocorbula wailesiana* (Harris in Dall)

Corbula bi-carta [sic] Hilgard in Hopkins, 1871, p. 11

Misspelling for *C. bicarinata* Conrad

Corbula (Caryocorbula) cappa Barry

See *Caryocorbula cappa* Barry

(?) *Corbula (Caryocorbula) carli* Gardner

See *Caryocorbula deussenii* Gardner

Corbula Churchisonii [sic] Lea, de Gregorio, 1890, p. 233 under *Cor-*
bula gibbosa, typographical error for *C. murchisonii* Lea

Corbula clarkeana Aldrich

See *Physoida clarkeana* (Aldrich)

Corbula (Caryocorbula) coloradoensis Gardner

Se *Caryocorbula coloradoensis* Gardner

Corbula compressa Lea**Corbulidae**

Corbula compressa Lea, 1833, p. 47, in part, pl. 1, fig. 15; H. C. Lea,
 1849, p. 98; Tuomey, 1858, p. 265; de Gregorio, 1890, p. 233, pl. 36,
 figs. 34-35 copy Lea, not 33a,b,c, cf. *C. gibbosa* Lea; Cossmann,
 1893, p. 6; Harris, 1895b, p. 12; Harris, 1919, p. 187, pl. 57, figs.
 1-6; Brann and Kent, 1960, pp. 258, 259

Corbula (Neaera) perdubia de Gregorio, 1890, p. 233, pl. 36, figs. 31,
 32 fide Harris, 1919

Corbula perdubia de Gregorio, Cossmann, 1893, p. 6; Harris, 1919, p.
 187 as *C. compressa* Lea

Corbula (Cuneocorbula) compressa Lea, Dall, 1898b, p. 842 in part

Not *Corbula compressa* d'Orbigny, 1845b, p. 458 *fide* d'Orbigny, 1850, p. 76

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes. Nos. 5067, 5068 ANSP; type *Corbula perdubia* de Gregorio formerly Univ. Palermo, Palermo, Sicily. Lost

Corbula compressa gregorioi Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

Corbula concha Aldrich

Corbulidae

Corbula concha Aldrich, 1895b, p. 19, pl. 5, fig. 6; Harris, 1897b, p. 66, pl. 13, fig. 11; Dall, 1898b, p. 841; Brann and Kent, 1960, p. 259

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type); Clarke Co., near mouth of Bashi Cr.

Type.—Holotype, No. 638969 USNM

Corbula conradi Dall

Corbulidae

Corbula (Cuneocorbula) conradi Dall, 1898b, p. 842 for *Corbula nasuta* Conrad in Emory, 1857, p. 161, pl. 19, fig. 4 "Western Texas". Not *Corbula nasuta* G. B. Sowerby I, 1833b, p. 35; nor Conrad, Aug. 1833b, p. 38; nor Conrad, 1846c, p. 398

Corbula nasuta Conrad, Schuchert, *et al.*, 1905, p. 169 = *C. conradi* Dall

Corbula conradi Dall, Harris, 1919, p. 186

Corbula (Cuneocorbula) conradi Dall, Gardner, in Trowbridge, 1923, pp. 95, 96

Corbula (Caryocorbula) conradi Dall, Gardner, 1945, p. 133 description of holotype, in part; Stenzel, Krause, and Twining, 1957, p. 168. Not *Corbula conradi* Dall, Lamy, 1941 living, p. 234, nor *C. conradi* Gardner, 1944 Miocene

As Stenzel, Krause, and Twining suggested this name for Conrad's specimen is of no value because the type locality is not definite, and the species is unrecognizable. Probably Gardner's Mexican and Texan shells (1945, p. 133, pl. 9, figs. 13, 16) should be regarded as a distinct form with a new name. See *Caryocorbula* sp. Gardner, 1945.

Type.—Holotype, No. 9899 USNM [*C. nasuta* Conrad = *C. conradi* Dall]

Corbula (Caryocorbula) conradi Dall, Gardner, 1945 in part

See *Caryocorbula* sp.

See also *Caryocorbula deusseni* (Gardner)

Corbula densata Conrad

See *Caryocorbula densata* (Conrad)

Corbula (Cuneocorbula) deusseni Gardner

See *Caryocorbula deusseni* (Gardner)

Corbula engonata Aldrich, 1886, not Conrad, 1848a

See *Corbula subengonata* Dall

(?) *Corbula* (*Caryocorbula*) sp. cf. *C. (C.) engonata* Conrad, Gardner, 1945

See *Caryocorbula deusseni* Gardner

Corbula engonatooides Gardner

See *Caryocorbula engonatooides* (Gardner)

Corbula extenuata Dall

Corbulidae

Corbula (fossata var. ?) *extenuata* Dall, 1898b, p. 844; Schuchert, et al., 1905, p. 168

Corbula (Aloides) extenuata Dall, Dall, 1900, p. 1192, pl. 36, fig. 6

Corbula extenuata Dall, Harris, 1919, p. 194, pl. 58, figs. 21-27; Brann and Kent, 1960, pp. 262, 263

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: Orangeburg Co., 3-6 mi. WNW. of Orangeburg (type)

Type.—Holotype, No. 115843 USNM

Corbula filosa Conrad, 1865b, p. 137, not *Corbula filosa* Conrad, 1865c, p. 145 Oligocene

See *Caryocorbula densata* (Conrad)

Corbula fossata Meyer and Aldrich

See *Caestocorbula fossata* (Meyer and Aldrich)

Corbula (fossata var. ?) *extenuata* Dall, 1898b

See *Corbula extenuata* Dall

Corbula gibbosa Lea, Heilprin, 1881; not Lea, 1833

See *Vokesula aldrichi* (Meyer)

Corbula gibbosa Lea

See *Parmicorbula gibbosa* (Lea)

Corbula gregorioi Cossmann

See *Caryocorbula alabamiensis gregorioi* (Cossmann)

Corbula (Cuneocorbula) gregorioi Cossmann, Dall, 1898b, in part.

Not Cossmann, 1893

See *Vokesula smithvillensis smithvillensis* (Harris)

Corbula ignota de Gregorio

See *Parmicorbula gibbosa* (Lea)

Corbula (Caryocorbula) kennedyi Gardner

See *Caryocorbula kennedyi* Gardner

Corbula milium Dall

Corbulidae

Corbula (Aloidis) milium Dall, 1898b, p. 845; Dall, 1900, p. 1192, pl. 36, fig. 19 (figure only); Schuchert, et al., 1905, p. 169; Aldrich, 1921, p. 25 reported common in Sucarnoochee Paleocene.

? *Corbula milium* Dall, Gardner, 1935, p. 189, Paleocene Texas, pl. 19, fig. 4 copy Dall

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Thomasville (type)

Aldrich (1921) reported the species "extremely common" in the Paleocene of Alabama, and Gardner (1935) discussed the species from the

Paleocene of Texas. Neither author figured their specimens. The identifications need to be checked.

Type.—Holotype, No. 107813 USNM

Corbula muchisonii Lea

See cf. *Caestocorbula muchisonii* (Lea)

Corbula muchisoni fossata Meyer and Aldrich

See *Caestocorbula fossata* (Meyer and Aldrich)

Corbula nasuta Conrad, 1833b; Conrad, 1846c

See *Caryocorbula alabamiensis* (Lea)

Corblua nasuta Conrad in Emory, 1857, Schuchert, et al., 1905

See *Corbula conradi* Dall

Corbula nasuta Conrad, Harris, 1894b, in part

See *Caryocorbula willistoni* Meyer

See also *C. willistoni arkansia* Harris

Corbula nasuta Conrad, Clark, 1895; Clark, 1896

See *Corbula* sp.

Corbula (Neaera) nasuta var. *ima* de Gregorio

See *Caryocorbula alabamiensis* variation "*ima*" (de Gregorio)

Corbula (Neaera) nasuta var. *tecla* de Gregorio

See *Caryocorbula alabamiensis* variation "*tecla*" (de Gregorio)

"*Corbula*" *nasutoides* Whitfield

Corbulidae

Corbula (Neaera) nasutoides Whitfield, 1885, p. 239, pl. 30, figs. 18, 19; Whitfield, 1899, p. 156

? *Corbula nasutoides* Whitfield, Dall, 1898b, p. 846

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr. Localities.—N.J.: Monmouth Co., Shark R. (type); "at Dr. Kneiskern's pits"

Type.—Holotype, No. 7807, State Mus., Trenton, N.J.

Corbula Natchitochiensis Hilgard in Hopkins, 1871, p. 11 *nomen nudum*

Corbula oniscus Conrad, 1833a; Conrad, 1846c only in part

See cf. *Caestocorbula muchisonii* (Lea)

Corbula oniscus Conrad, Clark, 1895; 1896; Clark and Martin, 1901, in part; Shimer and Shrock, 1944

See *Corbula* sp.

See also cf. *Caestocorbula muchisonii* (Lea)

Corbula oniscus Conrad, 1846c in part, not Conrad, 1833a

See *Parmicorbula gibbosa* (Lea)

Corbula oniscus Conrad, Heilprin, 1881; not Conrad, 1833a

See *Vokesula aldrichi* (Meyer)

Corbula pearlensis Meyer

See *Biocorbula pearlensis* (Meyer)

Corbula perdubia de Gregorio

Corbulidae

Corbula (Neaera) perdubia de Gregorio, 1890, p. 233, pl. 36, figs. 31,

32 = *C. compressa* Lea *fide* Harris, 1919, p. 187 young; Cossmann, 1893, p. 6 as *Corbula* only

Corbula (Aloidis) perdubia de Gregorio, Dall, 1898b, p. 844 in part
 Not *Corbula perdubia* of authors, Harris and Palmer, 1946, p. 114 Red
 Bluff; Brann and Kent, 1960, p. 268 cf. *C. laqueata* Casey, 1903
 See *Corbula compressa* Lea

Range.—Age unknown. Middle Eocene. Gosport sd. if equals *C. compressa* Lea

Locality.—Locality unknown

Type.—Formerly De Gregorio Coll. Univ. Palermo, Palermo, Sicily. Lost

Corbula (Neaera) prima Aldrich
 See *Cuspidaria prima* (Aldrich)

Corbula (Anapteris) regalis Van Winkle
 See *Anapteris regalis* Van Winkle

Corbula rugosa Lamarck, Heilprin, 1881, not Lamarck, 1806a, p. 467
 See *Vokesula aldrichi* (Meyer)

Corbula rugosa Lamarck, Heilprin, 1891, not Lamarck, 1806a, p. 467
 See *Vokesula smithvillensis smithvillensis* (Harris)

? *Corbula (Caryocorbula) santanensis* (Gardner)
 See *Caryocorbula deusseni* (Gardner)

Corbula smithvillensis Harris
 See *Vokesula smithvillensis smithvillensis* (Harris)
 See also *Vokesula smithvillensis petropolitana* Stenzel and Twining

Corbula subcompressa Gabb

Corbulidae

Corbula subcompressa Gabb, 1860d, p. 394, pl. 68, fig. 24; Harris, 1896,
 p. 68, pl. 6, fig. 9 syntype *fide* Harris; Johnson, 1905, p. 17; Shimer
 and Shrock, 1944, p. 431, pl. 172, fig. 12 copy Harris
 Not *Corbula subcompressa* Gabb, Whitfield, 1885, p. 180, pl. 23, fig.
 26 Cretaceous

Corbula sp. Harris, 1894b, p. 45, pl. 1, fig. 6

Corbula (Cuneocorbula) subcompressa Gabb, Dall, 1898b, p. 841

Range.—Paleocene. Clayton fm., lower Midway gr.; Porters Creek
 fm. (type), upper Midway gr.

Localities.—TENN.: *Hardeman Co.*, R.R. cut 2 mi. E. of Middle-
 ton (type); Hannah's. GA.: *Clay Co.*, Chattahoochee R. above
 Sandy Cr. ALA.: *Wilcox Co.*, Matthews Ldg., Alabama R.
 ARK.: *Pulaski Co.*, Marshall's well, Capitol Hill, Little Rock
 (Harris)

Types.—Syntypes, Safford Coll., unknown. (Seen by Harris,
 1896); ? ANSP (Johnson, 1905)

Corbula subengonata Dall

Corbulidae

Corbula engonata Conrad, Aldrich, 1886, p. 58; not Conrad, 1848a, b
Corbula alabamensis Lea var. Harris, 1897b, p. 68, pl. 13, figs. 14,
 14a; Brann and Kent, 1960, p. 255 as "hypotype"

Corbula subengonata Dall, 1898b, p. 841; Harris, 1919, p. 185, pl. 56,
 figs. 1-4, 7; 5, 6, 8 vars.; Brann and Kent, 1960, pp. 271, 272

Not *Corbula nasuta* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 74 see
Corbula sp.

Not *Corbula subengonata* Dall, Clark and Martin, 1901, p. 163 in part,
 not pl. 32, figs. 1, 1a, 2, 2a, 2b see *Corbula* sp.

Range.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Gregg's Ldg., Alabama R. (type); Bells Ldg., Alabama R. (Aldrich); Clarke Co., Woods Bluff, Tombigbee R.; Wilcox Co., Lower Peach Tree Ldg., Alabama R.; Choctaw Co., Tuscahoma Ldg., Tombigbee R.

Type.—Lectotype, No. 182 PRI (Harris specimen). The syntype to which Dall gave the new name *Corbula subengonata* would be in the USNM or the Harris specimen, pl. 13, figs. 14, 14a. There is no specimen in the USNM to which Dall gave the name. We are designating herein No. 182 PRI as the lectotype.

Corbula subengonata Dall, Clark and Martin, 1901; not Dall, 1898b
See *Corbula* sp.

Corbula subnasuta d'Orbigny, 1850
See *Caryocorbula alabamiensis* (Lea)

Corbula texana Gabb
See *Notocorbula texana* (Gabb)

Corbula (*Aloides*) *wailesiana* Harris in Dall
See *Caestocorbula wailesiana* (Harris in Dall)

Corbula willistoni Meyer
See *Caryocorbula willistoni* (Meyer)

Corbula (*Caryocorbula*) *willistoni arkansia* Harris
See *Caryocorbula willistoni arkansia* Harris

Corbula (*Caryocorbula*) spp.
See *Caryocorbula* spp.
See also *Caryocorbula deussenii* Gardner

***Corbula* (*Caryocorbula*) sp. indet. Corbulidae**
Corbula (*Caryocorbula*) sp. indet. Gardner, 1935, p. 192

Range.—Paleocene. Kincaid fm., lower Midway gr.
Locality.—TEXAS: Kaufman Co., USGS Sta. 11665, Water Hill, 5 mi. NE. Kemp
Type.—Unfigured specimen probably USNM

***Corbula* sp. Corbulidae**
Corbula subengonata Dall, Clark and Martin, 1901, p. 163 in part

Range.—Paleocene. Aquia fm.
Localities.—MD.: Charles Co., Glymont. For additional localities see Clark and Martin
Types.—Unfigured specimens, USNM

***Corbula* sp. Corbulidae**
Corbula nasuta Conrad, Clark, 1895, p. 5; Clark, 1896, p. 74. Not *C. nasuta* Conrad, 1833b, p. 38
Corbula subengonata Dall, Clark and Martin, 1901, p. 163 in part, pl. 32, figs. 1, 1a, 2, 2a, 2b. Not *C. subengonata* Dall, 1898b, p. 841

Range.—Lower Eocene. Nanjemoy fm., (figured)
Localities.—MD.: Charles Co., Popes Cr. VA.: King George Co., Woodstock
Type.—Specimen figured, USNM

Corbula sp.**Corbulidae**

Corbula oniscus Conrad, Clark, 1895, p. 5; Clark, 1896, p. 75; Clark and Martin, 1901, p. 164 in part, pl. 32, figs. 7, 7a, 8, 8a, 8b; Shimer and Shrock, 1944, p. 431, pl. 172, figs. 10, 11 copies Clark and Martin. Not *C. oniscus* Conrad, 1833a, p. 341

Range.—Lower Eocene. Nanjemoy fm.

Locality.—VA.: Prince George Co., Evergreen (specimens figured)

Types.—Specimens figured, USNM

Corbula sp.**Corbulidae**

Corbula sp. Barry, 1942+, p. 75, pl. 10, fig. 5

Range.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

Locality.—LA.: De Soto Par., auger hole on hillside on S. side on Hunter-Converse Highway, 0.1 mi. N. of De Soto-Sabine Par. line in sec. 16, T. 10 N., R. 14 W., depth 13 ft.

Type.—Figured specimen, No. 5032 LSU Pal. Mus.

Corbula sp. Harris, 1894b

See *Corbula subcompressa* Gabb

Crassatella versus Crassatellites

Keen, Nautilus, vol. 65, No. 1, p. 14, 1951

Crassatella synonym *Mactra*; *Crassatellites nomen nudum*

Crassatella alaeformis Conrad

See *Bathytormus alaeformis* (Conrad)

Crassatella alta Conrad**Crassatellidae**

Crassatella alta Conrad, 1832b, p. 21, pl. 7; (Harris reprint, 1893, p. 39, pl. 7); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 395, pl. 3, fig. 1; H. C. Lea, 1849, p. 98; Bronn, 1848a, p. 343; d'Orbigny, 1850, p. 383; not Conrad, 1855, p. 9 (Dall reprint, 1909, p. 163); Tuomey, 1858, pp. 265, 273, not p. 271 = Bells Ldg.; Dana, 1863, fig. 799; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5 in part; de Gregorio, 1890, p. 197, pl. 25, figs. 16, 17 copy Conrad, 1833; pl. 26, figs. 1-9, fig. 10 copy Conrad, 1846; Cossmann, 1893, p. 13; Dana, 1895, fig. 1485 same as 1863; Harris, 1895b, p. 3; Brann and Kent, 1960, p. 279

? *Crassatella alta* Conrad, Whitfield, 1885, p. 234, pl. 29, fig. 17

Not *Crassatella alta*, (Conrad), Clark and Martin, 1901, p. 182, pl. 42, fig. 3 *Crassatella* sp.

Crassatellites altus (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 104 (not "Dall" as in text), pl. 35, fig. 6; pl. 36, figs. 4-6; Brann and Kent, 1960, pp. 283, 284

Crassatellites alta (Conrad), Cooke, 1926a, pl. 95, fig. 2; Semmes, 1929, fig. 61-2; Scott, 1932, p. 328, pl. 23, fig. 4

? *Crassatellites alta* (Conrad), Kellum, 1926, p. 22

Cf. *Crassatella alta* Conrad, Richards, 1950, p. 18

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). Cf. N. C.: New Hanover Co., Castle Hayne Quarry (Kellum; Richards). [Not N. J.: Monmouth Co., Shark R. (Whitfield)]. [Not N. C.: Pender Co., Rocky Point (Kellum)]. [Not MD.: Prince Georges Co., Hardesty, (Clark and Martin)]

Types.—Probable syntypes (8), No. 30529, ANSP Moore, 1962, p. 36

Crassatella alta Conrad, Tuomey, 1858, p. 271
See *Crassatella tumidula* Whitfield

Crassatella alta (young) Heilprin, 1884b, p. 38
See *Lirodiscus smithvillensis* (Harris)

Crassatella antestriata Gabb Pl. 2, figs. 6, 7 **Crassatellidae**

Crassatella antestriata Gabb, 1860d, p. 388, pl. 67, fig. 53; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Heilprin, 1891a, p. 403; Harris, 1895a, p. 49, pl. 1, figs. 10, 10a

Probably not *Crassatella antestriata* Gabb, Aldrich, 1887, p. 81

Crassatellites antestriatus (Gabb), Harris, 1919, p. 98, pl. 34, figs. 2, 3; Renick and Stenzel, 1931, pp. 95, 104, pl. 6, fig. 5; Gardner, 1945, p. 90, pl. 6, figs. 7, 10, 11, 14; pl. 7, figs. 9, 10

Range.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.

Localities.—TEXAS: *Robertson Co.*, Wheelock [type *fide* Gardner, 1945]; *Lee Co.*, Elm Cr. between Evergreen and Orell's crossing; *Houston Co.*, Alabama Bluff, Trinity R.; 5 mi. W. of Crockett, Hurricane Bayou; *Cherokee Co.*, Baptizing Cr.; *Brazos Co.*, Little Brazos R.; *Burleson Co.*, Moseley's Ferry (Stone City Bluff) NE. MEXICO, 4 localities State of Nuevo León [see Gardner, 1945, p. 91]

Types.—Holotype and three paratypes, No. 13259 ANSP

Crassatella aquiana Clark **Crassatellidae**

Crassatella aquiana Clark, 1895, p. 5; Clark, 1896, p. 82, pl. 26, figs. 2a-c

Crassatellites aquiana (Clark), Clark and Martin, 1901, p. 181, pl. 42, figs. 1, 2a, 2b; Dall, 1903a, p. 1469 as *aquianus*

Range.—Paleocene. Aquia fm., (type)

Localities.—VA.: *Stafford Co.*, Aquia Cr. (type); Potomac Cr. MD.: *Charles Co.*, Reedy Run; Liverpool Point; Mattawoman; Glymont; *Prince Georges Co.*, Brooks Estate near Seat Pleasant

Types.—Syntypes, JHU, 1962

Crassatella capri-cranium Rogers and Rogers
See *Bathytormus alaeformis* (Conrad)

Crassatella clarkensis Dall
See *Bathytormus clarkensis* (Dall)

Crassatella clarkensis ferrocarolina (Harris)
See *Bathytormus clarkensis ferrocarolinus* (Harris)

Crassatella clarkensis ludoviciana (Harris)
See *Bathytormus clarkensis ludovicianus* (Harris)

Crassatella conradi Whitfield **Crassatellidae**

Crassatella Conradi Whitfield, 1885, p. 209, pl. 28, figs. 1-5 as *C. curta* Conrad; Whitfield, 1899, p. 156; Weller, 1907, p. 559 in synonymy of *C. littoralis* Conrad, 1869a, fig. 9 syntype *C. conradi*, fig. 10 copy Whitfield

- Range*.—Lower Eocene. Manasquan fm. (syntype). Middle Eocene Shark R. ml. (syntype), upper Claiborne group
Localities.—N. J.: Monmouth Co., Shark R. (syntype), Squankum (syntype); Ocean Co., New Egypt (syntype)
Types.—Syntype, Columbia Univ. lost; syntype, No. 9015/1 AMNH; syntype, Rutgers lost

Crassatella curta Conrad [questionable]**Crassatellidae**

- Crassatella curta* Conrad, 1863b, p. 578 no description *nomen nudum*;
 Conrad, 1866e, p. 104, pl. 8, fig. 2 "Va.?"
 ? *Crassatellites curtus* (Conrad), Dall, 1903a, p. 1469 = *C. altus*
 Conrad young *fide* Dall

Range.—?

Locality.—"Virginia ?" (type)

Type.—"USNM", Dall, 1903a. "Conrad gave no locality, but specimen USNM 1600 is catalogued as (Eastern Shore, Va.) and this probably is the erroneous locality referred to by Dall" (per. com., D. Wilson, June 16, 1962). [ANSP missing Moore, 1962, p. 52]

Crassatella declivis Heilprin

See *Bathytormus alaeformis* (Conrad)

Crassatella Delawarensis Gabb, Whitfield, 1885; not Gabb, 1860a

See *Crassatella* sp.

Crassatella eutawcolens (Harris)**Crassatellidae**

- Crassatellites eutawcolens* Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, fig. 4; Brann and Kent, 1960, p. 285
Crassatella eutawcolens (Harris), Richards and Palmer, 1953, p. 46, pl. 10, fig. 4

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

Localities.—S. C.: Orangeburg Co., Eutaw Springs (type). FLA.: Levy Co., Gulf Hammock

Type.—Holotype, No. 1404, PRI

Crassatella flexura Conrad

See *Bathytormus flexurus* (Conrad)

Crassatella flexurus Conrad "var."

See *Bathytormus clarkensis postclarkensis* (Harris)

Crassatella flexura postclarkensis (Harris)

See *Bathytormus clarkensis postclarkensis* (Harris)

Crassatella flexura producta Conrad

See *Bathytormus flexurus productus* (Conrad)

Crassatella gabbi Safford**Crassatellidae**

- Crassatella pteropsis* Gabb (not Conrad), 1860d, p. 395 in part, pl. 68, fig. 28. Not *C. pteropsis* Gabb, Schuchert, *et al.*, 1905, p. 174 = Cretaceous
 Not *Crassatella pteropsis* Conrad, 1860, p. 279, pl. 46, fig. 9

Crassatella gabbi Safford, 1864, p. 368 new name; Safford, 1869, p. 419 name only; Harris, 1896, p. 63 in part, pl. 5, figs. 7, 7a type, 8, 9, not figs. 10, 11 see *C. kennedyi* Harris *nomen nudum* see *C. sp.*; Brann and Kent, 1960, p. 281

Crassatella tumidula Whitfield, Aldrich, 1894b, p. 242

Crassatella sp. Harris, 1894b, p. 43

Crassatella gabbi (Safford), Dall, 1903a, p. 1469; Gardner, 1935, p. 151; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 5 copy Harris

Range.—Paleocene. Kincaid fm., lower Midway gr.; Porters Creek fm. (type), upper Midway gr.

Localities.—TENN.: *Hardeman Co.*, 2 mi. S. of Middleton (type); 2 mi. E. of Middleton; Hannah's 1 $\frac{3}{4}$ mi. NE. of Crainesville; $\frac{1}{2}$ mi. W. of Hannah's; Huddleston's 3 mi. W. of Crainesville; McDonald's mill, 4 mi. SW. of Middleton. MISS.: *Tippah Co.*, Reeves, 2 $\frac{1}{2}$ mi. NW. of Walnut. ALA.: *Wilcox Co.*, $\frac{3}{4}$ mi. W. of Prairie Bluff; $\frac{1}{4}$ mi. NW. of Prairie Bluff; 1 $\frac{1}{2}$ mi. SW. of Palmer's mill at S. McConnico's; 1 mi. S. of Palmer's mill; *Barbour Co.*, 1 $\frac{1}{3}$ mi. NE. of Clayton. GA.: probably Ga. side of Chattahoochee R., 3 mi. below mouth of Pataula Cr. TEXAS: for localities in Kaufman, Guadalupe, Medina, Maverick Cos. see Gardner, 1935, p. 152

Type.—Unknown. Type in Safford Coll. seen by Harris, 1896

***Crassatella halei* Harris**

Crassatellidae

Crassatella Mississippensis Conrad, Tuomey, 1858, pp. 265, 269, 271, not Conrad, 1848b, p. 122

? *Crassatella* sp. Aldrich, 1886, p. 57

Crassatella halei Harris, 1897b, p. 57, pl. 11, fig. 5; Brann and Kent, 1960, p. 281

Crassatella Halei Harris, Dall, 1903a, p. 1469; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 12 copy Harris

Range.—Lower Eocene. Nanafalia fm; Greggs Ldg. mem. (type), Tuscahoma fm.; and Bashi mem., Hatchetigbee fm.; respectively lower, middle, and upper Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type); *Wilcox Co.*, Yellow Bluff, Alabama R.; *Marengo Co.*, Nanafalia Ldg., Tombigbee R.

Type.—Holotype, No. 140 PRI

***Crassatella inglisia* Richards**

Crassatellidae

Crassatella inglisia Richards in Richards and Palmer, 1953, p. 46, pl. 9, figs. 9, 10

Range.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

Localities.—FLA.: *Levy Co.*, Sulphur Springs Ldg. left bank Wekiva R., SW. $\frac{1}{4}$ NW. $\frac{1}{4}$, sec. 32, T. 14 S., R. 16 E. (type); SW. $\frac{1}{4}$, sec. 34, T. 14 S., R. 16 E.; Inglis, right bank Withlacoochee R., SE. $\frac{1}{4}$ NW. $\frac{1}{4}$, sec. 3, T. 17 S., R. 16 E.; road metal pit, NE. $\frac{1}{4}$ SW. $\frac{1}{4}$, sec. 14, T. 15 S., R. 16 E.

Types.—Holotype, I-7541, paratype No. I-7542, Fla. Geol. Sur.

Crassatella ioannes (Gardner)**Crassatellidae**

Crassatellites ioannes Gardner, 1935, p. 153, pl. 11, fig. 1-6

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.; Wills Point fm., upper Midway gr.

Localities.—TEXAS: *Bastrop Co.*, Colorado R., 4 mi. below Webberville (type); $1\frac{1}{2}$ mi. below Travis-Bastrop Co. line; $4\frac{1}{2}$ - $4\frac{3}{4}$ mi. below Webberville

Types.—Holotype, No. 370909; paratype, No. 370910 USNM

Crassatella kennedyi Harris *nomen nudum* Texas ms referred in Harris, 1896, p. 63 as name never published

See *Crassatella gabbi* Safford

See *Crassatella* sp.

Crassatella littoralis Conrad**Crassatellidae**

Crassatella littoralis Conrad, 1868, p. 731, *nomen nudum*; Conrad, 1869b, p. 41, pl. 1, fig. 3, Whitfield, 1885, p. 212, pl. 28, figs. 6, 7

Crassatellites littoralis (Conrad), Dall, 1903a, p. 1469; Weller, 1907, p. 559, pl. 61, figs. 9, 10

Range.—Lower Eocene. Manasquan fm. (Weller). Middle Eocene. ? Shark R. ml. (type), upper Claiborne gr.

Localities.—N.J.: *Monmouth Co.*, ? Shark R. (type); Squankum; ? Farmingdale (Weller)

Type.—Missing ANSP, Moore, 1962, p. 72

Crassatella minor (Lea), Harris, 1919 in part

See *Crassinella aldrichi* Gardner

See also *Crassinella minor* (Lea)

Crassatella mississippiensis Conrad, Tuomey, 1858. Not Conrad, 1848b

See *Crassatella halei* Harris

Crassatella negreetensis (Harris)**Crassatellidae**

Crassatellites negreetensis Harris, 1919, p. 97, pl. 33, figs. 6-8; Brann and Kent, 1960, p. 285

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: *Sabine Par.*, 200 yds. below mouth of Negreet Bayou (type). Possibly S. C.: *Orangeburg Co.*, Eutaw Springs

Types.—Syntypes, Nos. 706-708 PRI

Crassatella ? obliquata Whitfield**Crassatellidae**

Crassatella obliquata Whitfield, 1885 p. 235, pl. 29, fig. 18; pl. 30, figs. 13, 14; Whitfield, 1899, p. 156

? *Crassatellites obliquatus* (Whitfield), Dall, 1903a, p. 1469; Harris, 1919, pp. 103-104, doubts species is a *Crassatella*

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N. J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, No. 7814 State Mus., Trenton, N.J.

Crassatella ocordia Harris**Crassatellidae**

Crassatella ocordia Harris, 1951, p. 20, pl. 10, figs. 1, 2, 3-4 ?; Brann and Kent, 1960, p. 281

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Clinchfield Quarry W. side (type). FLA.: *Marion Co.*, dump just SW. of mill and office Dixie Lime Products Co., Reddick

Types.—Syntypes, Nos. 24490–24492 PRI. Lectotype herein designated, No. 24490 PRI

Crassatella palmula Conrad

See *Bathytormus alaeformis* (Conrad)

Crassatella porcus Harris

Crassatellidae

Crassatella porcus Harris, 1951, p. 19, pl. 9, figs. 1-3

Range.—Uppermost Eocene. Bumpnose ls. (type)

Locality.—FLA.: *Jackson Co.*, quarry operated by Marianna Limestone Products Co., approximate center of sec. 23, T. 5N, R. 11 W., J-5, (type). Wayne Moore, 1955, p. 36

Type.—Holotype, lost

Crassatella producta Conrad

See *Bathytormus flexurus productus* (Conrad)

Crassatella protexta Conrad

See *Bathytormus protextus* (Conrad)

Crassatella protexta in De Gregorio, 1890

See *Bathytormus alaeformis* (Conrad)

Crassatella protexta lepida Dall in Cooke, 1943, p. 65 Ga. *nomen nudum*

Crassatella protexta sina Harris

See *Bathytormus protextus sinus* (Harris)

Crassatella pteropsis Gabb, 1860d in part. Not Conrad, 1860

See *Crassatella gabbi* Safford

Crassatella rhombea Whitfield

Crassatellidae

Crassatella rhombea Whitfield, 1885, p. 213, pl. 27, figs. 16-19; Whitfield, 1899, p. 156

Crassatellites rhombea (Whitfield), Weller, 1907, p. 561, pl. 61, fig. 8 (New Egypt)

Range.—Lower Eocene. Manasquan fm. (type)

Locality.—N. J.: *Ocean Co.*, New Egypt (syntype); *Monmouth Co.*, Squankum (syntype)

Types.—Syntype, formerly Columbia Univ. Coll. No. 19599 AMNH; syntype, No. 7458 State Mus., Trenton, N.J.

Crassatella rhomboidea Conrad

Crassatellidae

Crassatella rhomboidea Conrad, 1846c [May], p. 396, pl. 3, fig. 3 (not fig. 5 as in text and expl. of pl.); H. C. Lea, 1849, p. 98; Conrad, 1865a, p. 10

Crassatella subrhomboidea d'Orbigny, 1850, p. 383 new name. Not *C. rhomboidea* d'Archiac, 1846 [May +], p. 208

Crassatellites rhomboideus (Conrad), Dall, 1903a, p. 1469; Harris, 1919, p. 99, pl. 34, fig. 4 doubtful form

The name *C. rhomboidea* Conrad, 1846, May, is not preoccupied by *C. rhomboidea* d'Archiac, 1846, May + as supposed by D'Orbigny. The

following from D'Archiac, 1846, p. 217 explains that his publication was post May and pre July:

Observation

Ce Memoire ayant été présenté à la Société Géologique dans la séance du 4 Mai 1846, l'impression du texte et les planches commencés immédiatement étaient presque terminés lorsque parut, dans les premiers jours de juillet, la 22^e livraison de l'Iconographie zoophytologique de M. H. Michelin . . .

Range.—Doubtful. If from Orangeburg, S. C., would be middle Eocene.

Locality.—"S. C.: Orangeburg Co., Orangeburg" (type)

Type.—Holotype, No. 30579 ANSP, Moore, 1962, p. 93

Crassatella (Micromeris) senex Meyer

See "*Venericardia*" sp.

Crassatella sepulcollis Harris

Crassatellidae

Crassatella sepulcollis Harris, 1896, p. 64, pl. 6, figs. 1, 1a; Brann and Kent, 1960, p. 282

Crassatellites sepulcollis (Harris), Dall, 1903a, p. 1469

Range.—Paleocene. Naheola gr. (type), upper Midway gr.

Localities.—ALA.: Wilcox Co., $\frac{1}{2}$ mi. W. of Graveyard Hill; 1 mi. N. of Allenton. Two locations not same as in Brann and Kent, 1960

Types.—Holotype, No. 64; paratype, No. 65 PRI. Not syntypes as in Brann and Kent, 1960

Crassatella subrhomboidea d'Orbigny

See *Crassatella rhomboidea* Conrad

Crassatella texalta Harris

Crassatellidae

Crassatella texalta Harris, 1895a, p. 49, pl. 2, fig. 2; Gimbrede, 1962, pp. 1118, 1119

Crassatellites texaltus (Harris), Dall, 1903a, p. 1469 in part; Harris, 1919, p. 103, pl. 36, figs. 1 holotype, 2, 3

Range.—Middle Eocene. Hurricane lentil (type), base of Landrum mem., Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: Houston Co., Hurricane Bayou (Marster and Hodges' headright) (type); Alabama Bluff, Trinity R. MISS.: Clarke Co., Wautubbee; 4 mi. W. of Enterprise; Newton Co., $2\frac{1}{2}$ mi. E. of Newton. ? S. C.: Orangeburg Co., ? Eutaw Springs. ? N. C.: Craven Co., 17 mi. above Newbern on the Neuse R.

Type.—Holotype, No. 3580 BEG

Crassatella texana Heilprin

Crassatellidae

Crassatella texana Heilprin, 1891a, p. 406, pl. 11, fig. 6; Harris, 1895a, p. 50, pl. 2, fig. 1

Crassatellites texanus (Heilprin), Dall, 1903a, p. 1469; Harris, 1919, p. 97, pl. 34, fig. 1 same as Harris, 1895a; Gardner, 1945, p. 91

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr., Mount Selman fm., middle Claiborne gr.; Mexico (Gardner, p. 92); Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: *Cherokee Co.*, near McBee's schoolhouse (Heilprin); 2 mi. E. of Alto (Heilprin); Berryman's land; Kimble Headright; *Houston Co.*, Murchison's Headright and Lively's Place; *Bastrop Co.*, Smithville, Colorado R. (Heilprin); San Augustine Co. [not St.] (Heilprin). MISS.: [? Co.] H. Johnson's place (Harris, 1919). ? S. C.: *Orangeburg Co.*, Eutaw Springs; Vance's Ferry, Santee R. (cast may be var. of this sp.). NE. MEXICO (Gardner, 1945, p. 92) [Type locality not known.]

Type.—Holotype, missing BEG 1964

Crassatella trapaquara Harris

Crassatellidae

Crassatella trapaquara Harris, 1895a, p. 49, pl. 2, figs. 3, 3a
Crassatellites trapaquarus (Harris), Dall, 1903a, p. 1469; Harris, 1919, p. 96, pl. 33, figs. 1-5 (smaller fig. 3, type); Brann and Kent, 1960, p. 286, 287

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type); *Cherokee Co.*, 8 mi. E. of Alto; *Lee Co.*, Elm Cr., between Orrell's and Evergreen Crossing; *Houston Co.*, Murchison's Headright, N. boundary; R. Williams' Headright, NE. of Weches. ALA.: *Monroe Co.*, Lisbon; *Clarke Co.*, Coffeeville. LA.: *Winn Par.*, "Moore's Iron Mine", NW. $\frac{1}{4}$ sec. 21, T. 10 N, R. 2 W., "Marble Quarry", Winnfield; *Bossier Par.*, Fillmore, 2 mi. N. of Haughton [not W. of Houghton sic]. MISS.: *Clarke Co.*, Chickasawhay R. and Graveyard Bridge near Enterprise; [? Co.] Johnsons Place (location unknown)

Types.—Holotype, No. 701; paratypes, No. 702-705 PRI

Crassatella tumidula Whitfield, Aldrich, 1894b, p. 242. Not Whitfield, 1865

See *Crassatella gabbi* Safford

Crassatella tumidula Whitfield

Crassatellidae

Crassatella alta Conrad, Tuomey, 1858, p. 271 only

Crassatella tumidula Whitfield, 1865, p. 267, pl. 27, fig. 16; Aldrich, 1886, p. 57; de Gregorio, 1890, p. 198, pl. 26, fig. 11 copy Whitfield; not Aldrich, 1894b, p. 242; Harris, 1897b, p. 56, pl. 11, figs. 3, 4; Whitfield, 1899, p. 156; Brann and Kent, 1960, p. 283

Crassatellites tumidulus (Whitfield), Dall, 1903a, p. 1469; Gardner, 1945, p. 91, pl. 6, figs. 4, 6 holotype

Range.—Lower Eocene. Greggs Ldg. mem., Tusahoma fm., middle Wilcox [Sabine] gr. (type)

Localities.—ALA.: *Monroe Co.*, "six mi. above Claiborne, west side of river" [exact locality not differentiated] (type); Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R.

Type.—Holotype, No. UC 24476 CNHM

Crassatella wilcoxi (Brown and Pilsbry)

Crassatellidae

Crassatellites wilcoxi Brown and Pilsbry, 1912, p. 152, pl. 1, fig. 1; Richards, 1950, p. 18, fig. 61a

Range.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

Locality.—N. C.: New Hanover Co., Castle Hayne quarry, 1½ mi.

E. of Wilmington (type)

Type.—ANSP

Crassatella ? sp. Aldrich, 1886, p. 57

See *Crassatella halei* Harris

Crassatella sp. Harris, 1894b

See *Crassatella gabbi* Safford

***Crassatella* sp.**

Crassatellidae

Crassatellites alta (Conrad), Clark and Martin, 1901, p. 182, pl. 42, fig. 3. Not *Crassatella alta* Conrad, 1832b

Range.—Paleocene. Aquia fm.

Locality.—MD.: Ann Arundel Co., Hardesty

Type.—Figured specimen, USNM

***Crassatella* sp.**

Crassatellidae

Crassatellites texalta (Harris), Dall, 1903a, p. 1469 in part. Not *C. texalta* Harris, 1895a

Crassatella "alta—like forms" Harris, 1951, p. 18

Range.—Upper Eocene. "Ocala ls.," Ocala gr.

Locality.—FLA.: Marion Co., Ocala

Types.—Unfigured specimens, PRI (Harris)

***Crassatella* sp.**

Crassatellidae

Crassatella Delawareensis Gabb, Whitfield, 1885, p. 210, pl. 27, figs. 14, 15. Not Gabb, 1860a, p. 303

Range.—Lower Eocene. Manasquan fm.

Localities.—N. J.: Monmouth Co., Farmingdale; Ocean Co., near New Egypt

Types.—Figured specimens unknown. Not at N.J. State Mus., Trenton, 1964

? *Crassatella* sp.

Crassatellidae

Crassatella sp. Harris, 1899b, p. 302

Tellina sp. Barry, 1942 +, p. 71, pl. 9, figs. 8, 9

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

Localities.—LA.: Natchitoches Par., Marthaville; La Nana Bayou. For localities in Natchitoches and Sabine Pars. see Barry, 1942 +, p. 71

Type.—Figured specimen, No. 5217 LSU Pal. Mus.

***Crassatella* sp.**

Crassatellidae

Crassatella kennedyi Harris, Kennedy, 1895, p. 147 *nomen nudum* fide localities in Harris, Texas ms., p. 51

Crassatella gabbi Safford, Harris, 1896, p. 63 in part, pl. 5, figs. 10, 11, not *C. gabbi* Safford, 1864, p. 368

Crassatellites sp. Gardner, 1935, p. 152

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: "Milam Co., Brazos R., right bank at its very northern limit, 'Milam Bluff' of Penrose report. Kennedy, Taff, and Harris." Sta. 105, Harris ms. Texas Mus. (sta. of figured specimen).

Type.—Figured specimen, early Texas Geol. Sur., not found Bur. Ec. Geol., Univ. Texas, 1963

Crassatella sp.

Crassatellidae

Crassatellites sp. Clark and Martin, 1901, p. 183, pl. 42, figs. 4, 4a

Range.—Paleocene. Aquia fm.

Locality.—MD.: Charles Co., Clifton Beach

Type.—Figured specimen, USNM

Crassatella species a

Crassatellidae

Crassatellites species a Kellum, 1926, p. 22, pl. 3, fig. 1; Harbison, 1944, p. 4, pl. 2, fig. 1

Range.—Middle Eocene. Santee ls., upper Claiborne gr. *vide* Cooke and MacNeil, 1952, p. 20

Localities.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: New Hanover Co., Wilmington

Type.—Figured specimen, No. 353292 USNM (Kellum). Figured specimen ANSP (Harbison)

Crassatella species b

Crassatellidae

Crassatellites species b Kellum, 1926, p. 23, pl. 3, fig. 2; Harbison, 1944, p. 4

Range.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Castle Hayne ls., Jackson gr.

Localities.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner. N. C.: Pender Co., old Rock Point quarry; New Hanover Co., Wilmington

Type.—Figured specimen, No. 353293 USNM

Crassatella sp.

Crassatellidae

Crassatella sp. Harris and Palmer, 1946, p. 80, pl. 18, figs. 20, 21; Brann and Kent, 1960, p. 282

Range.—Upper Eocene. Lower Jackson gr.

Locality.—MISS.: Clarke Co., Garland Cr.

Type.—Figured specimen, No. 4301 PRI

Crassatella sp.

Crassatellidae

Crassatella sp. Harris, 1951, p. 18, pl. 8, figs. 5-7 (2 specimens); Brann and Kent, 1960, p. 282

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Localities.—GA.: Houston Co., Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry, W. side. FLA.: Marion Co., abandoned pit 1 mi. S. of Dixie Lime Products Co., office in Reddick or about 2.5 mi. NE. of Lowell, off Highway 441

Types.—Figured specimens, Nos. 24483, 24484 PRI

Crassatella sp.

Crassatellidae

Crassatella sp. Harris, 1951, p. 19, pl. 8, figs. 8-12; Brann and Kent, 1960, pp. 282, 283

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Localities.—FLA.: Marion Co., Ocala Lime Rock Corp., E. of Kendrick; Dixie Lime Products Co., Reddick. GA.: Houston Co., Pennsylvania Cement Corp., Clinchfield Quarry

Types.—Figured specimens, Nos. 24485-24489 PRI

Crassatella sp.

Crassatellidae

Crassatella sp. Richards and Palmer, 1953, p. 47, pl. 10, fig. 3

Range.—Upper Eocene. Inglis fm., lower Ocala gr.

Locality.—FLA.: Citrus Co., Dunnellon Phosphate Mining Co., SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10, T. 18 S., R. 19 E.

Type.—Figured specimen, No. I-7549 Fla. Geol. Sur.

Crassatellites alaeformis (Conrad)

See *Bathytormus alaeformis* (Conrad)

Crassatellites alaeformis (Conrad) "var." Aldrich, 1931, p. 6, pl. 6, fig. 5

See *Bathytormus protectus* (Conrad) young

Crassatellites (Crassinella) aldrichi Gardner

See *Crassinella aldrichi* Gardner

Crassatellites (Crassinella) aldrichianus Harris sp., Aldrich, 1911

See *Miodontiscus* sp.

Crassatellites alta (Conrad), Clark and Martin, 1901

See *Crassatella* sp.

Crassatellites altus (Conrad)

See *Crassatella alta* Conrad

Crassatellites antestriatus (Gabb)

See *Crassatella antestriata* Gabb

Crassatellites aquiana (Clark)

See *Crassatella aquiana* Clark

Crassatellites clarkensis Aldrich, 1911 not Dall, 1903a

See cf. *Miodontiscus timothii* new name

Crassatellites clarkensis Dall

See *Bathytormus clarkensis* (Dall)

Crassatellites clarkensis ferrocrolinus Harris

See *Bathytormus clarkensis ferrocrolinus* (Harris)

Crassatellites clarkensis ludovicianus Harris

See *Bathytormus clarkensis ludovicianus* (Harris)

Crassatellites curtus (Conrad)

See *Crassatella curta* Conrad

Crassatellites eutawcolens Harris

See *Crassatella eutawcolens* (Harris)

Crassatellites flexurus (Conrad)

See *Bathytormus flexurus* (Conrad)

Crassatellites flexurus postclarkensis Harris

See *Bathytormus clarkensis postclarkensis* (Harris)

- Crassatellites flexurus productus* (Conrad)
See *Bathytormus flexurus productus* (Conrad)
- Crassatellites gabbi* (Safford)
See *Crassatella gabbi* Safford
- Crassatellites halei* (Harris)
See *Crassatella halei* Harris
- Crassatellites ioannes* Gardner
See *Crassatella ioannes* (Gardner)
- Crassatellites littoralis* (Conrad)
See *Crassatella littoralis* Conrad
See also under *Crassatella conradi* Whitfield
- Crassatellites minor* (Lea)
See *Crassinella minor* (Lea)
- Crassatellites minutissimus* (Lea)
See *Micromeris minutissima* (Lea)
- Crassatellites negreetensis* Harris
See *Crassatella negreetensis* (Harris)
- Crassatellites obliquatus* (Whitfield)
See *Crassatella obliquata* Whitfield
- Crassatellites palmulus* (Conrad)
See *Bathytormus alaeformis* (Conrad)
- Crassatellites (Cuna) parva* (Lea)
See *Cuna parva* (Lea)
- Crassatellites productus* (Conrad)
See *Bathytormus flexurus productus* (Conrad)
- Crassatellites protextus* (Conrad)
See *Bathytormus protextus* (Conrad)
- Crassatellites (Scambula) psychopterus* Dall
See *Lirodiscus (Crustuloidea) psychopterus* (Dall)
- Crassatellites pteleina* Gardner
See *Crassinella pteleina* (Gardner)
- Crassatellites (Crassinella) pygmaea* (Conrad)
See *Crassinella pygmaea* (Conrad)
- Crassatellites rhombea* (Whitfield)
See *Crassatella rhombea* Whitfield
- Crassatellites rhomboideus* (Conrad)
See *Crassatella rhomboidea* Conrad
- Crassatellites sepulcollis* (Harris)
See *Crassatella sepulcollis* Harris
- Crassatellites texaltus* (Harris)
See *Crassatella texalta* Harris
- Crassatellites texaltus* (Harris), Dall, 1903a, in part
See *Crassatella* sp.

Crassatellites texanus (Heilprin)

See *Crassatella texana* Heilprin

Crassatellites trapaquarus (Harris)

See *Crassatella trapaquara* Harris

Crassatellites tumidulus (Whitfield)

See *Crassatella tumidula* Whitfield

Crassatellites wilcoxi Brown and Pilsbry

See *Crassatella wilcoxi* (Brown and Pilsbry)

Crassatellites sp.

See *Crassatella* sp.

Crassina ? *veta* Conrad, 1869b, not *Astarte veta* Conrad, 1869a

See "*Astarte*" *castanella* Whitfield

Crassinella aldrichi Gardner

Crassatellidae

Crassatella minor (Lea), Harris, 1919, p. 92 in part. Not *Astarte minor* Lea, 1833, p. 63

Crassatellites (*Crassinella*) *aldrichi* Gardner, 1927, p. 368, [pl. 2], figs. 14-17

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: *Wilson Co.*, 4 mi. SE. of Floresville (type)

Types.—Syntypes, No. 369249 USNM

Crassinella minor (Lea)

Crassatellidae

Astarte minor Lea, 1833, p. 63, pl. 2, fig. 38; H. C. Lea, 1849, p. 96; Conrad, 1865a, p. 9; Harris, 1895b, p. 28

Not *Astarte parva* Lea, Conrad, 1865a, p. 9

Astarte (*Micromeris*) *minor* Lea, de Gregorio, 1890, p. 201, pl. 27, figs. 1-4; fig. 5 copy Lea

Micromeris minor (Lea), Cossmann, 1893, p. 13

Crassatellites (*Crassinella*) *minor* (Lea), Dall, 1903a, pp. 1475, 1480

Crassinella minor (Lea), Harris, 1919, p. 92 in part, pl. 32, figs. 14-17 (not to fig. 27 as in text); Brann and Kent, 1960, p. 288

Range.—Middle Eocene. Cf. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—TEXAS: *Lee Co.*, Elm Cr.; cf. *Houston Co.*, Alabama Bluff, Trinity R. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5225 ANSP

Cf. Crassinella neuseana (Harris)

Cf. Crassatellidae

Astarte neuseana Harris, 1919, p. 92, pl. 32, fig. 13; Brann and Kent, 1960, p. 93

Range.—Eocene (type)

Locality.—N. C.: *Craven Co.*, Rocky Ldg., Neuse R. (type)

Type.—Holotype, (lost) PRI

Crassinella pteleina Gardner

Crassatellidae

Crassatellites (*Crassinella*) *pteleina* Gardner, 1927, p. 368, [pl. 2] figs. 18, 19

Range.—Middle Eocene. Yegua fm. (type), uppermost Claiborne gr.

Locality.—TEXAS: Lee Co., Elm Cr. (type)

Type.—Holotype, No. 369251 USNM

Crassinella pygmaea (Conrad)

Crassatellidae

Gouldia pygmaea Conrad, 1865b, p. 139; Conrad, 1865d, p. 212, pl. 21, fig. 5; Conrad, 1866a, p. 23

? *Gouldia perditia* Conrad, 1865a, p. 10 *nomen nudum*, maybe intended for *G. pygmaea*

Crassatellites (Crassinella) pygmaea (Conrad), Dall, 1903a, p. 1475

Crassinella pygmaea (Conrad), Harris and Palmer, 1946, p. 79, pl. 18, figs. 17, 18; Brann and Kent, 1960, p. 288

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—MISS.: Clarke Co., "Enterprise" error for Garland Cr. (type) *fide* Aldrich, 1885c, p. 307; Hinds Co., Moodys Branch, Jackson

Type.—Probable holotype, No. 13226 ANSP Moore, 1962, p. 91

Crassostrea alabamiensis (Lea)

Ostreidae

Ostrea alabamiensis Lea, 1833, p. 91, pl. 3, fig. 71; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Heilprin, 1884c, p. 309, pl. 64, fig. 2 copy Lea; de Gregorio, 1890, p. 174, pl. 18, figs. 1, 2; figs. 3, 4 copies Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 3; not Harris, 1897b, p. 41, pl. 6, fig. 7; Dall, 1898b, pp. 678, 679 in part; Harris, 1919, p. 8, pls. 1, 2; pl. 6, fig. 1; not Harris and Palmer, 1946, pl. 5, fig. 4; Stenzel, 1957a, p. 887; Brann and Kent, 1960, pp. 630, 631

Ostrea semilunata Lea, 1833, p. 90, pl. 3, fig. 69; Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309, pl. 64, fig. 4 copy Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 41

Ostrea lingua canis Lea, 1833, p. 92, pl. 3, fig. 72; Conrad, App. in Morton, 1834, p. 6 = *O. alabamiensis* Lea; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309, pl. 64, fig. 3 copy Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 25

Ostrea pincerna Lea, 1833, p. 92, pl. 3, fig. 73; H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 309; Harris, 1895b, p. 34

Ostrea alabamiensis var. *semilunata* Lea, de Gregorio, 1890, p. 174, pl. 18, fig. 14 copy Lea

Ostrea alabamiensis var. *linguaecanis* Lea, de Gregorio, 1890, p. 174, pl. 18, figs. 6-11; figs. 12, 13 copy Lea

Ostrea alabamiensis var. *pincerna* Lea, de Gregorio, 1890, p. 174, pl. 18 [not 16 as in text]; fig. 5 copy Lea

Ostrea pincema [sic] Lea, Cossmann, 1893, p. 18

Ostrea claibornensis Conrad ms. [*fide* Harris, 1895b, pp. 3, 11], *nomen nudum*; Dall, 1898b, p. 679 under *O. alabamiensis* Lea

Crassostrea alabamiensis (Lea), Stenzel, Krause, and Twining, 1957, p. 97

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Holotype, No. 5439 ANSP. Holotype *O. lingua canis* Lea, No. 5441 ANSP. Holotype *O. pincerna* Lea, No. 5442 ANSP. Holotype *O. semilunata* Lea, No. 5437 ANSP

Crassostrea amichel (Gardner)**Ostreidae**

Ostrea alabamiensis of authors not *O. alabamiensis* Lea, 1833, p. 91

Ostrea contracta amichel Gardner, 1945, p. 81, pl. 3, figs. 1, 2; Perrilliat Montoya, 1963, p. 5, pl. 8, fig. 1; pl. 9, fig. 1; pl. 10, fig. 1; pl. 11, fig. 1

Crassostrea amichel (Gardner), Stenzel, Krause, and Twining, 1957, p. 97

Range.—Middle Eocene. Laredo fm. (type), upper Claiborne gr.; Yegua fm., uppermost Claiborne gr. (Lonsdale and Day, 1937, p. 55; Patterson, 1942, p. 259)

Localities.—TEXAS: Webb Co., 1½ mi. N. of the crossing of Highway 80 over Arroyo Dolores, USGS 14057 (type). For further localities see Gardner, 1945, p. 82

Types.—Syntypes, No. 496573 USNM

Crassostrea contracta (Conrad)**Ostreidae**

Ostrea contracta Conrad, 1856b, p. 269; Conrad in Emory, 1857, p. 160, pl. 18, figs. 1a-d; Dall, 1898b, p. 683 under *O. georgiana*; Schuchert, et al., 1905, p. 468; Gardner, 1945, pp. 81, 82; not Harris, 1951, p. 6 under *O. georgiana*; Perrilliat Montoya, 1963, p. 5, pl. 6, figs. 1, 2; pl. 7, figs. 1, 2

Ostrea alabamiensis (var. *contracta*) Conrad, Harris, 1919, pp. 8, 9 in part, pl. 4 only sole figure

Ostrea alabamiensis georgiana Conrad, Gardner 1923, p. 110, pl. 29, figs. 6, 7; pl. 30; Trowbridge, 1932, pl. 44, figs. 1, 2; pl. 45. Not Conrad, 1834, p. 156

Range.—Upper Eocene. Jackson gr. ["Probably" Harris, 1919]

Localities.—MEXICO: Tamaulipas, "Oyster Point, near Mier, Mexico", [not known see Gardner, 1945, p. 81]; 5 mi. above Roma, and opposite Mier (Emory)

Types.—Syntypes (2), No. 9904, USNM Moore 1962, p. 49

Crassostrea frionis (Harris)**Ostreidae**

Ostrea alabamiensis var. *frionis* Harris, 1919, p. 9, pl. 5, fig. 1

Ostrea alabamiensis Lea, Renick and Stenzel, 1931, p. 104

Ostrea frionis Harris, Gardner, 1945, p. 82

Crassostrea frionis (Harris), Stenzel, Krause, and Twining, 1957, p. 95, pl. 12, figs. 3-10

Range.—Middle Eocene. Stone City beds, middle Claiborne gr., possibly Cook Mt. fm., upper Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 96, horizon of holotype unknown)

Localities.—TEXAS: SE. corner Frio Co., San Miguel Cr. below De Viller's ranch (type); Burleson Co., Stone City Bluff, Brazos R.; Sabine Co., rt. bank of Sabine R. near center of long west-east reach of Harper's Bend (Bur. Ec. Geol. loc. No. 201-T-5)

Type.—Formerly in Texas State Mus. No. 1710 (1919), not located by Stenzel, et al., 1957

Crassostrea gigantissima (Finch)**Ostreidae**

Ostrea gigantissima Finch, 1824, p. 39; Conrad, 1835a, p. 29 (Harris reprint, 1893, p. 77) in part; Harris, 1919, p. 200; Howe, 1937, p. 362, pl. 44, figs. 5, 6; Cooke and MacNeil, 1952, p. 26; Stenzel, Krause, and Twining, 1957, p. 97

Ostrea gigantea Vanuxem in Morton, 1828a, p. 69 *nomen nudum*; Heilprin, 1884a, p. 149. Not Heilprin, 1884b, p. 35; not *Ostrea gigantea* L. C. Johnson, 1889, p. 215—*O. blaniptedi* Howe, 1937, p. 362 Miocene
Ostrea georgiana Conrad, 1834, p. 156; Conrad, 1835a, p. 29 (Harris reprint, 1893, p. 77); Conrad, 1842b, p. 179; H. C. Lea, 1849, p. 103; Dana, 1863, p. 519 in part, fig. 811 not Oligocene; Conrad, 1865a, p. 15; Conrad, 1865f, p. 71; Conrad, 1866a, p. 20; ? Hilgard in Hopkins, 1871, p. 12; not Heilprin, 1884b, pp. 35, 95; Heilprin, 1884c, p. 311 in part; not Aldrich, 1886, p. 43, not Smith and Johnson, 1887, p. 23; de Gregorio, 1890, p. 177 in part; ? Cossmann, 1893, p. 18; Dall, 1898b, p. 683 in part; not Harris in Dana, 1895, p. 898, fig. 1492; Veatch and Stephenson, 1911, pp. 243-247; ? Richards, 1950, p. 18; ? Harris, 1951, p. 6, pl. 1, figs. 1, 2; Brann and Kent, 1960, p. 634

Ostrea georgiana forma normalis Conrad, Dall, 1898b, p. 684 in part, Shell Bluff only

Ostrea alabamiensis forma georgiana Conrad, Harris, 1919, p. 9, pl. 5, fig. 2, not text p. 8; Brann and Kent, 1960, p. 631

Ostrea alabamiensis (var. *contracta*), Conrad, Harris, 1919, pp. 8, 9 in part, pl. 3 sole fig.; Brann and Kent, 1960, p. 631

Ostrea alabamiensis subsp. *georgiana* Conrad, Kellum, 1926, p. 17 Pollocksville [Pollocksville], N.C.

Not *Ostrea georgiana* Conrad var. Richards, 1943, p. 519, pl. 86, figs. 1-3 Trent

Range.—Upper Eocene. Barnwell fm. (type)

Locality.—GA.: Burke Co., Shell Bluff, Savannah R. (type).

Other localities not verified

Types.—Type lost *vide* Pilsbry in Howe, 1937, p. 365. Neotype ANSP, designated and deposited by Howe, 1937. *Ostrea georgiana* Conrad missing, Moore, p. 1962, p. 63

Crassostrea sp.

Ostreidae

Ostrea alabamiensis Lea, Harris and Palmer, 1946, pl. 5, fig. 4; not *O. alabamiensis* Lea, 1833, p. 91; Brann and Kent, 1960, p. 631

Range.—Upper Eocene. Cf. upper Jackson gr.

Locality.—ARK.: St. Francis Co., Crow Cr.

Type.—Figured specimen, No. 4148 PRI

Crassostrea sp.

Ostreidae

Ostrea alabamiensis Lea, Harris, 1897b, p. 41, pl. 6, fig. 7 not *O. alabamiensis* Lea, 1833, p. 91; Brann and Kent, 1960, p. 630

Range.—Lower Eocene. Upper Wilcox [Sabine] gr.

Locality.—ALA.; Washington Co., Hatchetigbee Bluff, Tombigbee R.

Type.—Figured specimen, No. 217 PRI

Crassostrea sp.

Ostreidae

Ostrea alabamiensis Lea var., Harris, 1919, p. 8, pl. 5, fig. 3

Range.—Middle Eocene. Weches fm., middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Burleson Shell Bluff, Brazos R., 1 mi. below Burleson-Milam Co. line

Type.—Figured specimen, No. 55 Texas State Mus., 1919

Crenella costata (Lea)

See *Crenella margaritacea* (Conrad)

Crenellá isocardioides (Lea)**Mytilidae**

Hippagus isocardioides Lea, 1833, p. 72, pl. 2, fig. 50; H. C. Lea, 1849, p. 100; Fischer, 1860, pp. 295, 300; Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 226, pl. 35, figs. 22-25; figs. 26-28 copy Lea; Cossmann, 1893, p. 17; Harris, 1895b, p. 23

Crenella isocardioides (Lea), Dall, 1898b, p. 803; Harris, 1919, p. 36, pl. 17, figs. 21-24; Stewart, 1930, p. 103; Brann and Kent, 1960, pp. 289, 290

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Probable holotype, No. 5301 ANSP

Crenella ? latifrons Conrad**Pl. 1, figs. 4, 5 Mytilidae**

Crenella latifrons Conrad, 1860, p. 296; Conrad, 1865a, p. 11; Harris, 1895b, p. 24; Dall, 1898b, p. 803

? *Crenella latifrons* Conrad, Harris, 1919, p. 35, pl. 17, figs. 14-16

Not *Modiola tenuis* Meyer, 1887a, p. 10, pl. 2, fig. 7 identified same as

Crenella latifrons Conrad by Dall, 1898b, p. 798

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr. (? type)

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (? type), "Dr. Showalter" (type), Harris, 1899a, p. 44 stated the "Dr. Showalter" material probably came from Matthews Landing, Midway gr. Harris in 1895b and 1919, identified the specimens from Claiborne as *C. latifrons*. The type is in ANSP with no locality. Specimens have been found in the Claiborne but not in the Midway.

Type.—Type, ANSP, no locality *vide* Harris, 1919, p. 35; missing Moore, 1962, p. 69

Crenella margaritacea (Conrad)**Mytilidae**

Stalagmium margaritaceum Conrad, 1833c, p. 39; (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 390; Conrad, 1865a, p. 10; Conrad, 1866a, p. 5; Harris, 1895b, p. 27; Nicol, 1945, p. 619

Myoparo costatus Lea, 1833, p. 74, pl. 2, fig. 51 as "*P. costatus*"; Conrad, App. in Morton, 1834, p. 8 = *Stalagmium margaritaceum*; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 13; Nicol, 1945, p. 618

Crenella (Stalagmium) margaritaceum Conrad, Conrad, 1860, p. 281

Crenella costata (Lea), de Gregorio, 1890, p. 185, pl. 22, figs. 8-14, fig. 15 copy Lea; Cossmann, 1893, p. 17

Crenella margaritacea (Conrad), Stoliczka, 1871, p. 368; Dall, 1898b, p. 803; Harris, 1919, p. 35, pl. 17, figs. 17-20; Stewart, 1930, p. 103; Brann and Kent, 1960, p. 290

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (Harris); Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). TEXAS: Lee Co. (Harris)

Type.—Lost *vide* Harris, 1919, p. 36; missing Moore, 1962, p. 73. Holotype, *M. costatus* Lea ANSP

Crenella ? tenuis (Meyer)**Mytilidae**

Modiola tenuis Meyer, 1887a, p. 10, pl. 2, fig. 7; Harris, 1919, p. 35

VolSELLA? tenuis (Meyer), Harris and Palmer, 1946, p. 43, pl. 10, fig. 12 copy Meyer

Crenella tenuis (Meyer), Dall, 1898b, pp. 798, 803 in part, equal to *C. latifrons* "Claibornian and Jacksonian"

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, No. 638882 USNM

Criocardium nucleolus Whitfield

See *Cardium nucleolum* (Whitfield)

Crustuloides Harris, 1919

Subgenus of *Lirodiscus* Conrad, 1869. Type species *Crassatellites psychopterus* Dall, 1900; 1903a

Cubitostrea (Cubitostrea) divaricata (Lea)

Ostreidae

Ostrea divaricata Lea, 1833, p. 91, pl. 3, fig. 70; Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395 under *O. sellaeformis*; Conrad, 1865a, p. 15 under *O. sellaeformis* Conrad; Conrad, 1866a, p. 3; Heilprin, 1884b, p. 86; Heilprin, 1884c, p. 310, pl. 64, fig. 1 copy Lea; Cossmann, 1893, p. 19; Harris, 1895b, p. 16

Ostrea flabellula Lamarck, H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 310 not Lamarck, 1806a, p. 164

Ostrea sellaeformis var. *divaricata* Lea, de Gregorio, 1890, p. 176, pl. 19, fig. 13 copy Lea; Dall, 1898b, p. 677 in part, section *Cymbulostrea* p. 678; Harris, 1919, p. 12, pl. 9, fig. 7; Brann and Kent, 1960, p. 639

Ostrea sellaeformis mut. *vermilla* de Gregorio, 1890, p. 176 has been placed in part in *Cubitostrea divaricata* (Lea) by Stenzel, Krause, and Twining, 1957, p. 92. *C. divaricata* is from the Cook Mountain fm. (fide Stenzel). De Gregorio's collection is supposed to have come from the Gosport sand at Claiborne. Mixtures are suspected in his material, but positive evidence is not available. Hence it seems better in view of indefinite information to separate the forms retaining *O. vermilla* as the Gosport sand species. See *Cubitostrea sellaeformis vermilla* (de Gregorio)

Ostrea (Cubitostrea) divaricata Lea, Sacco, 1897b, p. 14; Stenzel, 1945, p. 39

Cubitostrea (Cubitostrea) divaricata (Lea), Stenzel, Krause, and Twining, 1957, p. 92, pl. 9, figs. 5, 7-11

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type fide Stenzel in Stenzel, Krause, and Twining, 1957)

MISS.: *Newton Co.*, Newton

Type.—Holotype, No. 5438 ANSP

Cubitostrea (Cubitostrea) linguafelis (Whitfield)

Ostreidae

Ostrea (Alectrionia ?) linguafelis Whitfield, 1885, p. 223, pl. 29, fig. 1; Dall, 1898b, p. 677 under *O. sellaeformis* Conrad; Whitfield, 1899, p. 162 as *linguifelis*. Whitfield's figure is suggestive of *C. sellaeformis* stock but without material the species has been left as described.

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N. J.: Monmouth Co., Shark R. (type)

Type.—Holotype, No. 7839, State Mus., Trenton, N. J.

Cubitostrea () lisbonensis (Harris) Ostreidae

Ostrea sellaeformis (?) var. *lisbonensis* Harris, 1919, p. 12, pl. 9, figs. 1-6; Gardner, 1945, p. 79, pl. 1, figs. 20-22; Brann and Kent, 1960, pp. 639, 640

Ostrea (Cubitostrea) lisbonensis Harris, Stenzel, 1945, pp. 39-46

Cubitostrea () lisbonensis (Harris), Stenzel, 1949, pp. 39-47, figs. 4, 6, 7

Cubitostrea lisbonensis (Harris), Stenzel, Krause, and Twining, 1957, p. 94

Range.—Middle Eocene. Tyus mem. and Viesca mem., Weches fm., middle Claiborne gr. (Stenzel); Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: *Natchitoches Par.*, Chestnut (type); *Natchitoches*; *Winn Par.*, Marble Quarry; *Bienville Par.*, 35 mi. SE. of Creston; *Lincoln Par.*, Chautauqua. ALA.: *Monroe Co.*, Lisbon, Alabama R.; *Hamilton Bluff*, Alabama R. TEXAS: *Burleson Co.*, Colliers Ferry, Brazos R.; *Brazos Co.*; *Robertson Co.*; *Cherokee Co.* MEXICO: Gardner, 1945

Types.—Syntypes, Nos. 381-386 PRI

Cubitostrea (Cubitostrea) perplicata (Dall) Ostreidae

Ostrea sellaeformis perplicata Dall, 1898b, p. 678; Schuchert, *et al.*, 1905, p. 472; Harris, 1919, pp. 13, 14, text fig. 1

Ostrea (Cubitostrea) perplicata Dall, Stenzel, 1945, p. 39+

Cubitostrea (Cubitostrea) perplicata (Dall), Stenzel, 1949, pp. 37, 42, 45, figs. 3, 6, 7; Stenzel, Krause, and Twining, 1957, p. 95

Range.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

Locality.—ALA.: *Covington Co.*, Caton's Bluff, Conecuh R., WNW. of Andalusia (type)

Types.—Syntypes, No. 129775 USNM

Cubitostrea (Cubitostrea) petropolitana Stenzel and Twining Ostreidae

Ostrea sellaeformis Conrad var. 1 in part, Renick and Stenzel, 1931, p. 104

Cubitostrea (Cubitostrea) petropolitana Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 94, pl. 11, figs. 5-12

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff (type), Brazos R.

Types.—Holotype, No. 20670 BEG (figs. 7, 8); paratypes, No. 20674 BEG (figs. 5, 6); No. 20675 BEG (figs. 9, 10), No. 20676 BEG (figs. 11, 12); No. 20797-20800 BEG (unfigured paratypes)

Cubitostrea (Cubitostrea) sanctiaugustini Stenzel and Twining Ostreidae

In part *Ostrea falciformis* Conrad, 1863a, p. 291, not "Enterprise, Miss."; Conrad, 1865b, p. 140, pl. 11, fig. 1 not "Enterprise, Miss."; Conrad, 1866a, p. 3 "Ala." see *O. falciformis* Conrad [*Cubitostrea*]

Cubitostrea (*Cubitostrea*) *sanctiaugustini* Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 93, pl. 10, figs. 1-7, text fig. 13 new name for *O. falciformis* Conrad in part not *O. falciformis* Goldfuss, 1833, p. 22; 1862 (2 ed.), p. 21

Range.—Middle Eocene. Tyus mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: San Augustine Co., excavation E. of intersection of South Liberty and East Planters streets, 3 blocks E. and 3 blocks S. of SE. corner of the courthouse square, 0.4 mi. air-line distance SE. of courthouse, San Augustine (type of *C. sanctiaugustini* only)

Types.—Holotype, No. 60686 BEG (fig. 3); paratypes, No. 20701 BEG (figs. 1, 2); No. 20702 BEG (figs. 4, 5); No. 20703 BEG (figs. 6, 7); No. 20724 BEG (unfigured paratypes)

Cubitostrea (*Cubitostrea*) *sanctiaugustini* Stenzel and Twining in part
See *Ostrea falciformis* Conrad [*Cubitostrea*]

***Cubitostrea* (cf. *Cubitostrea*) *sellaeformis* (Conrad) Ostreidae**

Ostrea sellaeformis Conrad, 1832b, p. 27, pl. 13, fig. 2 (Harris reprint, 1893, p. 45, pl. 13, fig. 2); Morton, 1833b, p. 130; Conrad, App. in Morton, 1834, p. 6; Conrad, 1842b, p. 192, pl. 1, fig. 1 (from James R. below City Point, Va.); H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Dana, 1863, fig. 798; Conrad, 1865a, p. 15 as [*stelliformis*]; Conrad, 1866a, p. 3; Heilprin, 1884c, p. 311, pl. 62, figs. 1, 2; pl. 63, fig. 1; de Gregorio, 1890, p. 175, pl. 19, (not pl. 18 as in text) figs. 5, 6; fig. 11 copy *O. radians* Conrad, 1832b; fig. 12 copy Conrad, 1832b; pl. 20, fig. 5 copy Conrad, 1842b; Dana, 1895, fig. 1482 same as 1863; Harris, 1895b, p. 41; Clark, 1895, p. 5; Clark, 1896, p. 87 in part, pl. 35, figs. 1a-d James R., Va.; pl. 36, figs. 1a, b; ? Harris, 1897b, p. 41, pl. 6, fig. 2; Dall, 1898b, p. 677 in part; Clark and Martin, 1901, p. 192 in part, pls. 48, 49 copy Clark, 1896; Schuchert, et al., 1905, p. 472; Veatch, 1906, p. 37, pl. 19, figs. 1, 1a; Deussen, 1914, p. 56, pl. 5, figs. 1, 1a; O. B. Hopkins, 1917, p. 292, pl. 27, figs. 6, 6a; Harris, 1919, p. 10, pl. 6, figs. 2-12, pl. 7; ? Kellum, 1926, p. 17; Cooke, 1926a, p. 271 pl. 95 fig. 1; Semmes, 1929, fig. 61-1; not Renick and Stenzel, 1931, p. 104 (= *C. (C.) petropolitana* Stenzel and Twining); Stenzel, 1936, p. 276; Harbison, 1944, p. 4, pl. 3, fig. 6; Shimer and Shrock, 1944, p. 399, pl. 154, fig. 23 copy Clark and Martin; Gardner, 1945, p. 80; not Sutton, 1946, p. 1681; cf. Richards, 1948, p. 2, pl. 2, figs. 14, 15; Richards, 1950, p. 15; not McLean, 1956, p. 307 in chart; Brann and Kent, 1960, pp. 638, 639

Ostrea radians Conrad, 1832b, p. 27, pl. 13, fig. 1 (Harris reprint, 1893, p. 45, pl. 13, fig. 1); Conrad, App. in Morton, 1834, p. 6 = *O. sellaeformis* Conrad; Conrad, 1842b, p. 193; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15 under *O. sellaeformis*; de Gregorio, 1890, pl. 19, fig. 11 copy Conrad

Ostrea sellaeformis mut. *laeta* de Gregorio, 1890, p. 176, pl. 19, figs. 1-4 (not pl. 11 as in text); Dall, 1898b, p. 678; ? Harris, 1919, p. 201, pl. 6, fig. 5 yg. of *C. sellaeformis* (Conrad); Brann and Kent, 1960, p. 639, No. 378

Ostrea (*Cubitostrea*) *sellaeformis* Conrad, Stenzel, 1945, pp. 39-41

Cubitostrea sellaeformis (Conrad), Stenzel, 1949, pp. 34-39, figs. 1, 2, 6, 7, 8; Stenzel, Krause, and Twining, 1957, p. 91 unnamed subgenus

Range.—Middle Eocene. Cook Mt. fm. (type); Wheelock mem., Cook Mt. fm., upper Claiborne gr.; Laredo fm., upper Claiborne gr.; Mexico (Gardner); Santee ls., upper Claiborne gr.

Localities.—ALA.: Monroe Co., "*Ostrea sellaeformis* zone" Claiborne Bluff, Alabama R. (type); Clarke Co., Coffeetown. VA.: James R. (illus. Conrad, Clark, 1896; Clark and Martin, 1901, copy). S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (Harbison). TEXAS: Burleson Co., Stone City Bluff above Stone City beds, Brazos R. MISS.: Clarke Co., Wautubbee; Enterprise. MEXICO: (Gardner, 1945)

Types.—Missing ANSP Moore 1962, p. 95. *Ostrea radians* Conrad missing ANSP Moore, 1962, p. 92. Holotype, *O. laeta* de Gregorio lost; formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily

Although De Gregorio's material was supposed to have come from the "sand" at Claiborne Bluff, apparently there was a mixture in the case of *C. sellaeformis*.

Cubitostrea sellaeformis Conrad "var." 1

Ostreidae

Ostrea sellaeformis Conrad var. 1, Renick and Stenzel, 1931, p. 104, in part, pl. 7, figs. 30, 31

Range.—Middle Eocene. Crockett fm., [Cook Mt. fm.], upper Claiborne gr.

Locality.—TEXAS: Brazos Co., Little Brazos R., near old inter-urban crossing

Types.—Figured specimens No. 21305 BEG (fig. 30); No. 21306 BEG (fig. 31)

Cubitostrea () sellaeformis vermilli (de Gregorio)

Ostreidae

Ostrea sellaeformis mut. *vermilli* de Gregorio, 1890, p. 176, pl. 18, figs. 15-23

Ostrea sellaeformis vermilli de Gregorio, Dall, 1898b, p. 678; ? Harris, 1919, p. 12, cf. pl. 9, fig. 8; ? Stenzel, Krause, and Twining, 1957, p. 92 restricts var. *vermilli* de Gregorio to pl. 18, figs. 15-18 (not figs. 21-23 = *Cubitostrea divaricata* Lea)

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: ? Bienville Par. (Harris)

Type.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost.

Cubitostrea () smithvillensis (Harris)

Ostreidae

Ostrea sellaeformis var. *smithvillensis* Harris, 1919, p. 11, pl. 8; Brann and Kent, 1960, p. 640 = holotype.

Ostrea (Cubitostrea) smithvillensis (Harris), Stenzel, 1945, pp. 39-40a, 42-43

Cubitostrea () smithvillensis (Harris), Stenzel, 1949, pp. 39-50, figs. 5-7

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: Bastrop Co., Smithville, Colorado R. (type)

Type.—Holotype, No. 380 PRI [not hypotype as in Brann and Kent]

Cucullaea compressirostra (Whitfield)**Cucullaeidae**

Idonearca compressirostra Whitfield, 1885, p. 199, pl. 26, figs. 15, 16; Whitfield, 1899, p. 158

Cucullaea compressirostra (Whitfield), Weller, 1907, p. 399, pl. 32, figs. 3, 4 type; Richards, 1958, p. 79, pl. 12, figs. 3, 4

Range.—Paleocene. Hornerstown fm. (type)

Localities.—N. J.: Monmouth Co., Mr. J. S. Cook's pits, Tinton Falls, (above Tinton beds [Cretaceous] *vide* Weller, 1907, p. 156) (type) [not Trenton Falls as in Whitfield, 1899]; ¾ mi. SW. of Hornerstown

Type.—Holotype, State Mus., Trenton, N.J.

Cucullaea depressa Tuomey, 1848, p. 153 *nomen nudum*

This name was used by Tuomey in list of species from the middle Eocene of South Carolina.

Cucullaea (Latiarca) gigantea Conrad**Cucullaeidae**

Cucullaea gigantea Conrad, 1830, p. 227, pl. 10, fig. 4 [a^s *Cucullaea*]; H. C. Lea, 1849, p. 98; Clark, 1895, p. 5; Clark, 1896, p. 84, pls. 30-33; Dall, 1898b, p. 603; Clark and Martin, 1901, p. 196, pls. 52-55; Scott, 1932, p. 328, pl. 23, fig. 3; Shimer and Shrock, 1944, p. 379, pl. 147, figs. 1, 2 copy Clark and Martin

Cucullaea onochela Rogers and Rogers, 1839b, p. 372, pl. 28, fig. 2; reprint 1884, p. 669, pl. 3, fig. 3 (3 figs); H. C. Lea, 1849, p. 98

Trigonarca (Latiarca) gigantea (Conrad), Conrad, 1863a, p. 289

Trigonarca (Latiarca) onochela [sic] (Rogers and Rogers), Conrad, 1863a, p. 289

Latiarca gigantea (Conrad), Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; Stoliczka, 1871, pp. xxi, 383 "typical" not type designation as stated in Nicol, 1954, p. 97; Nicol, 1954, p. 97

Latiarca onochela (Rogers and Rogers), Conrad, 1865a, p. 11 *L. onochela* [sic]; Conrad, 1866a, p. 4 *L. onochela* [sic]

Latiarca idonea Conrad, 1872a, p. 53, pl. 2, fig. 1 [not Amer. Jour. Conch.—A.N.S.P. 1862, p. 289]

Arca onochela (Rogers and Rogers), Heilprin, 1884b, p. 87 in part

Cucullaea (Latiarca) gigantea Conrad, Rutsch, 1943, p. 150

Cucullaea (Cyphoxis) gigantea Conrad, Vokes, 1961, p. 50, pl. 10, figs. 10-11

Range.—Paleocene. Aquia fm. (type)

Localities.—VA.: Stafford Co., Aquia Cr.; King George Co., Potomac Cr.; 2 mi. below Potomac Cr.; Paspotansa Cr. MD.: Charles Co., Liverpool Point; 1 mi. SE. of Marion; Clifton Beach; Glymont; Prince Georges Co., 1 mi. NE. of Piscataway; Upper Marlboro; 3 mi. W. of Leeland; Fort Washington (type); Ann Arundel Co., Scheckel's Farm near South River; Hardesty; Queen Ann Co., Rolph's Ldg., Chester R.; Cecil Co., Fredericktown

Types.—Probable syntypes, No. 30495 ANSP Moore, 1962, p. 63.

Latiarca onochela (Rogers and Rogers) holotype probably MCZ

Cucullaea gigantea Conrad, Clark and Martin, 1901 in part

See *Cucullaea transversa* Rogers and Rogers

Cucullaea (Cyphoxis) gigantea Conrad "var."**Cucullaeidae**

Cucullaea transversa Rogers and Rogers, Aldrich, 1886, pp. 40, 57, pl. 4, figs. 11, 11a; de Gregorio, 1890, p. 196 in part, pl. 25, figs. 1a, b

copy Aldrich; Harris, 1894a, p. 302; Cooke, 1926a, pl. 94, fig. 8; Semmes, 1929, fig. 59-8. Not *Cucullaea transversa* Rogers and Rogers, 1839b

Cucullaea gigantea Conrad var., Harris, 1897b, p. 49, pl. 8, figs. 3, 3a, 4; Clark and Martin, 1901, p. 196 in part; Brann and Kent, 1960, p. 293

Range.—Lower Eocene. Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Gregg's Ldg., Alabama R.; Bells Ldg., Alabama R.

Types.—Figured specimens (Harris), Nos. 143, 145 PRI

***Cucullaea kaufmanensis* Gardner**

Cucullaeidae

Cucullaea kaufmanensis Gardner, 1935, p. 129, pl. 7, figs. 1-4; Rutsch, 1943, p. 149

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Localities.—TEXAS: Kaufman Co., NE. corner of the J. W. Boyce 120 acres in the W. F. Butler Survey on the public rd. about 2½ mi. NE of Kemp (type); 5 mi. NE. of Kemp. Additional localities see Gardner, 1935.

Types.—Holotype, No. 370959; paratypes, No. 370960, 370961 USNM

***Cucullaea laevis* Tuomey**

Cucullaeidae

Cucullae [sic] *laevis* Tuomey, 1853, p. 194

Cucullaea levis Tuomey, Dall, 1898b, p. 603; Miller, B. L. and Stephenson, 1912, p. 55

Range.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

Locality.—N.C.: New Hanover Co., Wilmington (type)

Type.—Unknown

***Cucullaea macrodonta* Whitfield**

Cucullaeidae

Cucullaea macrodonta Whitfield, 1865, p. 267, pl. 27, fig. 17; not Harris, 1894b, p. 41; Harris, 1896, p. 51 in part, pl. 3, figs. 10, 10a; Dall, 1898b, p. 603; Whitfield, 1899, p. 156; Deussen, 1924, p. 43, pl. 14, figs. 6, 6a; Cooke, 1926a, p. 257, pl. 93, fig. 7; Semmes, 1929, fig. 51-7; Gardner, 1935, p. 125, pl. 7, fig. 5; Brann and Kent, 1960, p. 294

Arca (*Cucullaearca*) *macrodonta* (Whitfield), de Gregorio, 1890, p. 197, pl. 24, fig. 30 copy Whitfield

Cucullaea (*Latiara*) *macrodonta* Whitfield, Rutsch, 1943, p. 149

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.; Matthews Ldg. beds (type), uppermost Porters Creek fm., upper Midway gr.

Localities.—ALA.: Wilcox Co., "9 mi. below Prairie Bluff" (type) = Matthews Ldg., *vide* Bowles, 1939, p. 300; Matthews Ldg., 9 mi. W. of Camden, sec. 12, T. 12 N., R. 6 E., Alabama R. TEXAS: see Gardner, 1935, p. 126

Types.—Syntypes (2), No. UC 24475 CNHM

Cucullaea macrodonta Whitfield, Harris, 1896 in part (Texas)

See *Cucullaea texana* Gardner

Cucullaea macrodonta Whitfield, Harris, 1894b (Arkansas); not Whitfield, 1865, p. 267

See *Cucullaea saffordi* (Gabb)

Cucullaea onochela Rogers and Rogers

See *Cucullaea (Latiarca) gigantea* Conrad

Cucullaea rogersiana Nyst

See *Cucullaea transversa* Rogers and Rogers

***Cucullaea saffordi* (Gabb)**

Cucullaeidae

Arca Saffordii Gabb, 1860d, p. 397, pl. 68, fig. 38 (not fig. 37 as in text); ? I. Lea, 1861, p. 150

Cucullaea macrodonta Whitfield, Harris, 1894b, p. 41 *fide* Harris, 1896, p. 51

Cucullaea transversa Rogers, Aldrich, 1894b, p. 242

Cucullaea saffordi (Gabb), Harris, 1896, p. 51, pl. 3, fig. 11 copy Gabb; pl. 4, fig. 2; Dall, 1898b, p. 603; Gardner, 1935, p. 128; Brann and Kent, 1960, p. 294

Range.—Paleocene, Midway gr. (type)

Localities.—TENN.: *Hardeman Co.*, (type); Hannah's; Huddleston's; Middleton

Type.—Lost *fide* Harris

Cucullaea saffordi (Gabb), Harris, 1896 in part

See *Cucullaea texana* Gardner

***Cucullaea saffordi* (Gabb) "var."**

Cucullaeidae

Cucullaea saffordi (Gabb) "var." Harris, 1896, p. 52, pl. 4, fig. 1; Brann and Kent, 1960, p. 294

Range.—Paleocene. Midway gr.

Locality.—ALA.: *Wilcox Co.*, Hamburg between Oak Hill and Allentown

Type.—Figured specimen, No. 32 PRI

***Cucullaea texana* Gardner**

Cucullaeidae

Cucullaea macrodonta Whitfield, Harris, 1896, p. 51 in part

Cucullaea safford Gabb, Harris, 1896, p. 51 in part

Cucullaea (macrodonta subsp.?) *texana* Gardner, 1923, p. 111, pl. 29, figs. 4, 5

Cucullaea texana Gardner, Trowbridge, 1932, p. 35, pl. 30, figs. 1, 2 copy Gardner; Gardner, 1935, p. 127, pl. 7, figs. 6, 7

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Localities.—TEXAS: *Maverick Co.*, White Bluff on Rio Grande land of Indio Cattle Co. about 4½ mi. W. of S. of Jacal ranch house USGS Sta. 6575 (type). For further localities in Kaufman, Travis, Medina, Uvalde, and Maverick Cos., see Gardner, 1923, pp. 111, 112; 1935, p. 128

Type.—Holotype, No. 352267 USNM

***Cucullaea transversa* Rogers and Rogers**

Cucullaeidae

Cucullaea transversa Rogers and Rogers, 1839b, p. 373, pl. 29, fig. 1 (reprint, 1884, p. 670, pl. 4, fig. 1); H. C. Lea, 1849, p. 98; ? Cossmann, 1893, p. 17; Dall, 1898b, p. 603; not Cooke, 1926a, pl. 94, fig. 8; Rutsch, 1943, p. 150. Not *C. transversa* Gabb, 1862a = re-named *C. gabbi* Johnson, 1905 Cretaceous

- Arca* (C.) *Rogersiana* Nyst, 1848, p. 62
Trigonarca (*Latiarca*) *transversa* (Rogers and Rogers), Conrad, 1863a, p. 289
Latiarca transversa (Rogers and Rogers), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4
Arca rogersi Heilprin, 1882b, p. 449 new name for *Arca* (*Cucullaea*) *transversa* Rogers and Rogers. Not *Arca transversa* Say, 1822, p. 269
Arca (*Cucullaearca*) *transversa* (Rogers and Rogers), de Gregorio, 1890, p. 196 in part not pl. 25, figs. 1a, 1b
Cucullaea gigantea Conrad, Clark and Martin, 1901, p. 196 in part
 Range.—Lower Eocene. Nanjemoy fm. (type)
 Localities.—VA.: *King George Co.*, near Potomac R. (type); *Woodstock. MD.: Charles Co.*, Popes Cr.; *Prince Georges Co.*, Thrift (well)
 Type.—Probably MCZ (Cushman, 1907, p. 264)
Cucullaea transversa Rogers and Rogers, Aldrich, 1886; Harris 1894a; Cooke, 1926a
 See *Cucullaea gigantea* Conrad var.
Cucullaea transversa Rogers and Rogers, Aldrich, 1894b
 See *Cucullaea saffordi* (Gabb)

Cucullaea vulgaris Morton**Cucullaeidae**

- Cucullaea vulgaris* Morton, 1830a, p. 285, pl. 3, fig. 21; Johnson, 1905, p. 8; Weller, 1907, p. 397, pl. 32, figs. 5, 6; Richards, in Richards, et al., 1958, p. 75, pl. 13, fig. 3 (type ?), 5 see for synonymy, type discussion, and age
Idonearca medians Whitfield, 1885, p. 199, pl. 26, figs. 5, 6; Whitfield, 1899, p. 158 = *C. vulgaris* Morton *vide* Weller, p. 399
 Range.—Upper Cretaceous (type). Paleocene. Hornerstown fm.
 Localities.—N.J.: *Burlington Co.*, "Crosswicks ?" (type); *Birmingham*; *Ocean Co.*, New Egypt; *Gloucester Co.*, Sewell
 Types.—Syntypes, No. 19568 ANSP

Cucullaearca Conrad, 1865a**Arcidae**

- Type designation *C. lima* Conrad, 1848b, [designated by] Stoliczka, 1871 = *C. cuculoides* (Conrad), 1833
Cucullaearca cuculoides (Conrad)
 See *Barbatia cuculoides* (Conrad)
Cucullaearca lima (Conrad)
 See *Barbatia cuculoides* (Conrad)
Cucullaearca cuculoides (Conrad)
 See *Barbatia* (*Cucullaearca*) *cuculoides* (Conrad)

Cf. Cucullaria aldrichi Dall**Parallelodontidae**

- Barbatia* (*Cucullaria*) *aldrichi* Dall, 1898b, p. 630, pl. 32, fig. 19; Schuchert, et al., 1905, p. 89
Arca aldrichi (Dall), Sheldon, 1917, p. 23, pl. 5, fig. 5 copy Dall; Harris, 1919, p. 55, pl. 22, fig. 20 copy Dall
Cucullaria ? *aldrichi* Dall, Stewart, 1930, p. 66
 Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.
 Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)
 Type.—Holotype, No. 116004 USNM

Cucullaria ozarkensis Aldrich**Parallelodontidae**

Arca (*Cucullaria*) *ozarkensis* Aldrich, 1921, p. 22, pl. 3, figs. 13, 14

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Locality.—ALA.: Dale Co., Ozark (type)

Type.—Holotype, No. 35 GSATC

Cultellus (Ensiculus) conradi Cossmann**Solenidae**

Ensiculus Conradi Cossmann, 1893, p. 5, pl. 1, fig. 1

Cultellus (*Ensiculus*) *Conradi* Cossmann, Dall, 1900, p. 958; Harris, 1919, p. 195, pl. 59, fig. 3 copy Cossmann

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 11508 Lab. Géol., Sorbonne, Paris

Cumingia ? keittensis Harris**Semelidae**

Cumingia ? *keittensis* Harris, 1919, p. 173, pl. 52, figs. 14, 15; pl. 53, fig. 1

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: Calhoun Co., Keitt's Ravine [Kitts], 4.5 mi. NW. of Creston (type)

Types.—Syntypes, No. 559284 USNM

Cuna ? astartoides Harris**Crassatellidae**

Cuna ? *astartoides* Harris, 1919, p. 94, pl. 32, figs. 21, 21a; Brann and Kent, 1960, p. 294

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., Wautubbee (type)

Type.—Holotype, No. 698 PRI

Cuna monroensis (Meyer)**Crassatellidae**

Astarte Monroensis Meyer, 1887a, p. 10, pl. 2, fig. 6; de Gregorio, 1890, p. 201, pl. 27, figs. 32, 33 copies Meyer; Cossmann, 1893, p. 13 under *Micromeris parva*; Dall, 1903a, p. 1481 listed in synonymy under *Crassatellites* (*Cuna*) *parvus* Lea

Cuna monroensis (Meyer), Harris, 1919, p. 94, pl. 32, figs. 22, 23 (copy Meyer)

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, Nos. 638885, 638886 USNM

Cuna parva (Lea)**Crassatellidae**

Astarte parva, Lea, 1833, p. 63, pl. 2, fig. 37; H. C. Lea, 1849, p. 96; Conrad, 1865a, p. 9; Harris, 1895b, p. 32

Micromeris parva (Lea), Conrad, 1866a, p. 5; Cossmann, 1893, p. 13 includes *Astarte subparva* Meyer

Astarte (*Micromeris*) *subparva* Meyer, 1887a, p. 11, pl. 2, fig. 5; de Gregorio, 1890, p. 201, pl. 27, fig. 20 copy Meyer

Astarte (*Micromeris*) *parva* Lea, de Gregorio, 1890, p. 200, pl. 27, fig. 31 copy Lea

Crassatellites (Cuna) parva (Lea), Dall, 1903a, p. 1480 includes *Astarte subparva* Meyer
Cuna parva (Lea), Harris, 1919, p. 93, pl. 32, figs. 18a-e; Brann and Kent, 1960, pp. 294, 295
Cuna var. *subparva* (Meyer), Harris, 1919, p. 93, pl. 32, fig. 19 copy Meyer

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, No. 5223, rt. valve lost [*vide* Harris, 1919, p. 93] ANSP; *Astarte subparva* Meyer, No. 638887 USNM

***Cuna parva fimbriata* Harris**

Crassatellidae

Cuna parva fimbriata Harris, 1919, p. 94, pl. 32, figs. 20, 20a; Brann and Kent, 1960, p. 295

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 697 PRI

Cuna var. *subparva* (Meyer)

See *Cuna parva* (Lea)

***Cuspidaria aequivalvis* (Whitfield)**

Cuspidariidae

"*Neaera aequivalvis*" Whitfield, 1885, p. 240, pl. 30, figs. 20, 21; Whitfield, 1899, p. 161

Cuspidaria aequivalvis (Whitfield), Dall, 1903a, p. 1505

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N. J.: Monmouth Co., Shark R. (type)

Type.—Holotype, AMNH

Cuspidaria alternata (Aldrich), Cossmann, 1893; Dall, 1903a

See *Cuspidaria attenuata* (Aldrich)

***Cuspidaria attenuata* (Aldrich)**

Cuspidariidae

Neaera alternata Aldrich, 1886, p. 38 (pl. 6, fig. 15 as *attenuata lapsus pennae*). Not *Neaera alternata* (d'Orbigny), Gabb, 1873, p. 248

Corbula (Neaera) alternata (Aldrich), de Gregorio, 1890, p. 232, pl. 37, fig. 20 copy Aldrich

Cuspidaria alternata (Aldrich), Cossmann, 1893, p. 7

Cuspidaria attenuata (Aldrich), Dall, 1903a, p. 1505 not "Meyer and Aldrich"; Harris, 1919, p. 184, pl. 55, fig. 21 copy Aldrich

Dall, 1903a, p. 1505 stated that *Neaera alternata* Aldrich, 1886, was preoccupied by a "*Neaera alternata* (Orb.) Gabb" and therefore, the *lapsus* of Aldrich, pl. 6, fig. 15 expl. as *attenuata* could be utilized as the substitute name. This appears to be a feasible method of settlement of the problem. D'Orbigny did not use *Neaera alternata*. His original name was *Sphena alternata* d'Orbigny, 1845c, p. 324, Recent, Gabb, 1873, p. 248 identified the Miocene fossil as the Recent and placed the species in *Neaera* which is the incident Dall referred to. The species was not an original name of Gabb. Maury, 1917, p. 196 renamed the identification of the Miocene species, *Cuspidaria islahispaniola*, *Sphena alternata* d'Orbigny, 1845c is identified as *Cuspidaria alternata* (d'Orbigny) which would make *C. alternata* (Aldrich) a secondary homonym of *C. alternata*

(d'Orbigny). McLean, 1951 (p. 49), listed *C. alternata* d'Orbigny as synonymous with *C. costellata* (Deshayes) in Bory (not 1837 as in McLean), 1833, p. 86. The solution for *Cuspidaria alternata* (Aldrich) would be to follow Dall and employ the specific name *attenuata*.

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

Type.—Holotype, No. 638797 USNM

Cuspidaria multiornata (Meyer and Aldrich)

Cuspidariidae

Neaera (*Cardiomya*) *multiornata* Meyer and Aldrich, 1886, p. 46, pl. 2, fig. 19

Cuspidaria multiornata (Meyer and Aldrich), Dall, 1903a, p. 1505 probably a *Cardiomya*

Cuspidaria prima var. *multiornata* (Meyer and Aldrich), Harris, 1919, p. 183, pl. 55, figs. 18 copy of type, 19, 20; Brann and Kent, 1960, p. 296

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Clarke Co., Wautubbee (type). LA.: Winn Par., St. Maurice (Harris)

Type.—Holotype, No. 638747 USNM

Cuspidaria prima (Aldrich)

Cuspidariidae

Neaera prima Aldrich, 1886, p. 38, pl. 6, fig. 14

Cuspidaria prima (Aldrich), Cossmann, 1893, p. 7; Harris, 1897b, p. 74, pl. 14, fig. 14; Harris, 1919, p. 183, pl. 55, fig. 17 copy Aldrich

Corbula (*Neaera*) *prima* (Aldrich), de Gregorio, 1890, p. 233, pl. 37, fig. 19 copy Aldrich

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Specimen USNM labelled type but is not the specimen figured by Aldrich *vide* D. Wilson (pers. com. June 16, 1962)

Cuspidaria prima multiornata (Meyer and Aldrich)

See *Cuspidaria multiornata* (Meyer and Aldrich)

Cyclas alveata (Conrad)

See *Linga* (*Cavilinga*) *pomilia alveata* (Conrad)

Cyclas carinifera (Conrad)

See *Linga carinifera* (Conrad)

Cyclas claibornensis Conrad

See *Saxolucina* (*Plastomiltha*) *claibornensis* (Conrad)

Cyclas curta Conrad

See *Myrtea* ? *curta* (Conrad)

Cyclas dolabra (Conrad)

See *Lucina* (*Recurvella*) *dolabra* Conrad

Cyclas impressa (Lea)

See *Linga* (*Cavilinga*) *pomilia* (Conrad)

Cyclas modesta Conrad

See *Lucina* (*Callucina*) *papyracea* Lea

- Cyclās pandata* (Conrad)
See *Eomiltha pandata* (Conrad)
- Cyclas papyracea* (Lea)
See *Lucina* (*Callucina*) *papyracea* Lea
- Cyclas pomilia* (Conrad)
See *Linga* (*Cavilinga*) *pomilia* (Conrad)
- Cyclas subvexa* Conrad
See *Eophysema subvexa* (Conrad)
- Cyclas symmetrica* (Conrad)
See *Epilucina rotunda* (Lea)
- Cyprina morrisii* Conrad 1865f. Not J. de C. Sowerby, 1841
See *Pitar ovalis* (Whitfield)
- Cytherea aequorea* Conrad
See *Callista* (*Costacallista*) *aequorea* (Conrad)
- Cytherea aequorea* mut. *cominduta* de Gregorio
See *Callista* (*Costacallista*) *aequorea* (Conrad)
- Cytherea aequorea* mut. *comis* Lea, de Gregorio
See *Callista* (*Callista*) *perovata* (Conrad)
- Cytherea aequorea* mut. *Hydii* Lea, de Gregorio
See *Callista* (*Costacallista*) *aequorea* (Conrad)
- Cytherea aequorea* var. *mortoni* Conrad
See *Callista* (*Costacallista*) *mortoni* (Conrad)
- Cytherea aequorea* mut. *subvitrea* de Gregorio
See *Callista* (*Callista*) *perovata subvitrea* (de Gregorio)
- "*Cytherea albarea* [sic] Say", Tuomey, 1858, p. 265 = sp. Not *Cytherea albaria* Say, 1830, pl. 59, figs. 1, 2 = Miocene [*Callista albaria* (Say)]
- Cytherea comis* Lea
See *Callista* (*Callista*) *perovata* (Conrad)
- Cytherea discoidalis* Conrad, 1833b, p. 37
See *Rhabdopitaria discoidalis* (Conrad)
- Cytherea* (*Dione*) *discoidalis* Conrad, Heilprin, 1891a
See under *Katherinella* ? *trigoniata bastropensis* (Harris)
- Cytherea eversa* Conrad
See *Pitar eversus* (Conrad)
- Cytherea eversa* Conrad, Tuomey, 1858, p. 271
See *Dosiniopsis lenticularis* (Rogers and Rogers)
- Cytherea* (*Caryatis*) *exigua* (Conrad)
See *Pitar* ? *exiguus* (Conrad)
- Cytherea globosa* Lea
See *Pitar poulsoni* (Conrad)
- Cytherea hatchetigbeensis* Aldrich
See *Pelecypora hatchetigbeensis* (Aldrich)

- Cytherea hydana* Conrad
See *Gratchupia* (*Cytheriopsis*) *hydana* (Conrad)
- Cytherea Hydii* Lea
See *Callista* (*Costacallista*) *aequorea* (Conrad)
- Cytherea jacksonensis* Meyer, 1885a, pp. 461, 467 *nomen nudum*;
Palmer, 1927, p. 214
- Cytherea lenis* (Conrad)
See *Pitar lenis* (Conrad)
- Cytherea lenticularis* Rogers and Rogers
See *Dosiniopsis lenticularis* (Rogers and Rogers)
- Cytherea liciata* Conrad
See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea mccordia* Ruffin *nomen nudum*; Tuomey, 1848, p. 154;
Harris, 1919, p. 201
- Cytherea minima* Lea
See *Katherinella trigoniata* (Lea)
- Cytherea minima* Lea, Aldrich, 1886, p. 53; Palmer, 1927, p. 214
not Lea, 1833
See *Pitar* (*Pitar*) *nuttalliopsis* (Heilprin)
- Cytherea mortoni* Conrad
See *Callista* (*Costacallista*) *mortoni* (Conrad)
- Cytherea nuttali* Conrad
See *Pitar* (*Pitar*) *nuttali* (Conrad)
- ? *Cytherea nuttali* Conrad, 1857, p. 162, pl. 4, fig. 5; (Not Conrad,
1834)
See *Katherinella* ? *trigoniata bastropensis* (Harris)
- Cytherea nuttalli* Conrad, Heilprin, 1891a. Not Conrad, 1834
See *Katherinella*? *trigoniata bastropensis* (Harris)
- Cytherea nuttalliopsis* Heilprin
See *Pitar* (*Pitar*) *nuttalliopsis* (Heilprin)
- Cytherea ovata* Rogers and Rogers
See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea ovata* Rogers and Rogers, Clark
See *Pitar* (*Pitar*) *pyga* (Conrad)
See also *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)
- Cytherea ovata pyga* Conrad
See *Pitar* (*Pitar*) *pyga* (Conrad)
- Cytherea perovata* Conrad
See *Callista* (*Callista*) *perovata* (Conrad)
- Cytherea perovata*? Conrad, Aldrich, 1886, p. 53
See *Macrocallista sylvaerupis* (Harris)
- Cytherea poulsoni* Conrad
See *Pitar poulsoni* (Conrad)

Cytherea pyga ConradSee *Pitar (Pitar) pyga* (Conrad)*Cytherea Sayana* Conrad, Tuomey, 1858, pp. 265, 274Not *Cytherea Sayana* Conrad, 1833a, p. 345 or Conrad, 1834, p. 124 or Conrad, 1838, p. 13 = Miocene-Pleistocene*Cytherea subcrassus* LeaSee *Rhabdopitaria subcrassus* (Lea)*Cytherea subimpressa* ConradSee *Macrocallista subimpressa* (Conrad)*Cytherea texacola* (Harris)See *Pitar (Calpitaria) tornadonis* (Harris)*Cytherea tornadonis* (Harris)See *Pitar (Calpitaria) tornadonis* (Harris)*Cytherea trigoniata* LeaSee *Katherinella trigoniata* (Lea)See also *Rhadopitaria discoidalis* (Conrad) in part*Cytherea trigoniata subcrassa* LeaSee *Rhabdopitaria subcrassa* (Lea)*Cytherea* sp.See *Pitar* sp.**"Cytherea (Dosiniopsis ?)" sp.****Veneridae***Cytherea (Dosiniopsis ?)* sp. Harris, 1894b, p. 44, pl. 1, fig. 5*Range*.—Paleocene. Clayton fm., lower Midway gr.*Localities*.—ARK.: *Pulaski Co.*, two mi. n. of Bradford; Fourche Cr., near mouth Crooked Cr., near Alexander (Harris, pp. 28, 44)*Type*.—Figured specimen (USNM, 1894)*Cytheriopsis hydana* (Conrad)See *Gratelupia (Cytheriopsis) hydana* (Conrad)*Dione aequorea* (Conrad)See *Callista (Costacallista) aequorea* (Conrad)*Dione annexa* ConradSee *Callista (Callista) annexa* (Conrad)*Dione Delawarensis* Gabb, 1860a, p. 302 is Cretaceous. N. J., Delaware*Dione discoidalis* Conrad, 1865a, p. 6See *Katherinella trigoniata* (Lea)*Dione eversa* (Conrad)See *Pitar eversus* (Conrad)*Dione lenis* (Conrad)See *Pitar lenis* (Conrad)*Dione liciata* (Conrad)See *Pitar (Pitar) ovatus* (Rogers and Rogers)*Dione mortoni* (Conrad)See *Callista (Costacallista) mortoni* (Conrad)

Dione nuttali (Conrad)

See *Pitar* (*Pitar*) *nuttali* (Conrad)

Dione ovata (Rogers and Rogers)

See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)

Dione perovata (Conrad)

See *Callista* (*Callista*) *perovata* (Conrad)

Dione poulsoni (Conrad)

See *Pitar* *poulsoni* (Conrad)

Dione pyga (Conrad)

See *Pitar* (*Pitar*) *pyga* (Conrad)

Dione securiformis Conrad

See *Pitar* (*Pitar*) *securiformis* (Conrad)

Dione subimpressa (Conrad)

See *Macrocallista subimpressa* (Conrad)

Diplodonta anteproducta (Harris)

See *Timothygnus anteproductus* (Harris)

Diplodonta astariformis Conrad

See *Diplodonta* (*Diplodonta*) *ungulina* (Conrad)

Diplodonta (*Timothygnus*) *bulla* (Conrad)

See *Timothygnus bulla* (Conrad)

Diplodonta (**Diplodonta**) **corbiscula** Harris

Diplodontidae

Diplodonta corbiscula Harris, 1919, p. 130, pl. 40, figs. 20, 21 21a; Stenzel, Krause, and Twining, 1957, p. 117; Brann and Kent, 1960, p. 330

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 1138 PRI

Diplodonta (*Timothygnus*) *deflata* Harris

See *Timothygnus deflatus* Harris

Diplodonta deltoidea Conrad

See *Diplodonta unguina* (Conrad)

Diplodonta (**Diplodonta**) **hopkinsensis** Clark

Diplodontidae

Diplodonta hopkinsensis Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 22, figs. 1a-d; Dall, 1900, p. 1181; Clark and Martin, 1901, p. 174, pl. 36, figs. 5, 5a, 6 copy Clark

"*Sphaerella* sp." Harris, 1897b, p. 65, pl. 13, fig. 6 [*fide* Harris writing in PRI copy of Dall, 1900, p. 1182]; Brann and Kent, 1960, p. 806

Taras hopkinsensis (Clark), Shimer and Shrock, 1944, p. 423, pl. 168, figs. 31, 32 copy Clark and Martin

Diplodonta (*Diplodonta*) *hopkinsiensis* [*sic*] Clark, Stenzel, Krause, and Twining, 1957, p. 117

Range.—Lower Eocene. Nanjemoy fm. (type); Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—VA.: Prince George Co., Evergreen (type). ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R. Clarke Co., Woods Bluff, Tombigbee R.; Thomasville
Type.—Holotype, USNM

Diplodonta (Diplodonta) inflata (Lea)

Diplodontidae

Egeria inflata Lea, 1833, p. 50, pl. 1, fig. 18; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 23

Mysia inflata (Lea), Conrad, App. in Morton, 1834, p. 7; Cossmann, 1893, p. 11

Diplodonta inflata (Lea), Conrad, 1858b, p. 166; Dall, 1900, p. 1182; Harris, 1919, p. 129 in part, pl. 40, figs. 17-19; Brann and Kent, 1960,

Sphaerella inflata (Lea), Conrad, 1865a, p. 9; Conrad, 1866a, p. 6 p. 330

Sphaerella levis Conrad, 1865a, p. 9; Conrad, 1866a, p. 6

Mysia levis (Conrad), Conrad, 1865c, p. 147; Harris, 1895b, p. 23 =

Egeria inflata Lea

Lucina (*Sphaerella*) *inflata* (Lea) and var. *paruminflata* de Gregorio, 1890, p. 207, pl. 29, fig. 13 copy Lea; figs. 15-17

Spherella [sic] *levis* Conrad, de Gregorio, 1890, p. 207

Not *Diplodonta* sp. Harris, 1897b, p. 65, pl. 13, fig. 7; not Brann and Kent, 1960, p. 331

Diplodonta (*Diplodonta*) *inflata* (Lea), Stenzel, Krause, and Twinning, 1957, p. 117

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Winn Par., Winnfield; Marble Quarry (Harris)

Types.—Holotype, No. 5088 (Lea Coll.), ANSP. Type *Lucina* (*Sphaerella*) *inflata* var. *paruminflata* de Gregorio, formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost. *Sphaerella levis* Conrad (3 possible syntypes), No. 30697 ANSP Moore, 1962, p. 69

Diplodonta (Diplodonta) marlboroensis Clark and Martin **Diplodontidae**

Diplodonta marlboroensis Clark and Martin, 1901, p. 173, pl. 36, fig. 4

Diplodonta (*Diplodonta*) *marlboroensis* Clark and Martin, Stenzel, Krause, and Twining, 1957, p. 117

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: Prince Georges Co., Upper Marlboro (type); Anne Arundel Co., Sheckel's Farm near South River

Type.—Holotype, USNM

Diplodonta (*Felaniella*) *nana* (Lea)

See *Microstagon nana* (Lea)

Diplodonta (Diplodonta) petropolitana Stenzel

Diplodontidae

Diplodonta (*Diplodonta*) *petropolitana* Stenzel in Stenzel, Krause, and Twining, 1957, p. 117, pl. 9, figs. 3, 4 and text fig. 18

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff (type), Brazos R.

Types.—Holotype, No. 20564 BEG (figs. 3, 4); paratypes, Nos. 20752-20755 BEG (9 specimens unfigured)

Diplodonta (Diplodonta) satex Gardner**Diplodontidae**

Diplodonta satex Gardner, 1927, p. 373, [pl. 4], figs. 34, 35

Diplodonta (Diplodonta) satex Gardner, Stenzel, Krause, and Twining, 1957, p. 117

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS; Anderson Co., $\frac{3}{4}$ mi. S. of Elkart (type)

Type.—Holotype, No. 369234, USNM

Diplodonta turgida Dall, 1900, in part not *Sphaerella turgida* Conrad (= Oligocene)

See *Timothyus anteproductus* (Harris)

See also *Timothyus bulla* (Conrad)

Diplodonta (Diplodonta) unguina (Conrad)**Diplodontidae**

Astarte unguina Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 7 = *Mysia*; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 47

Egeria rotunda Lea, 1833, p. 50, pl. 1, fig. 17; Conrad, App. in Morton, 1834, p. 7 = *Mysia unguina*; H. C. Lea, 1849, p. 99; Tuomey, 1858, pp. 265, 274; Harris, 1895b, p. 39

Mysia unguina (Conrad), Conrad, App. in Morton, 1834, p. 7; Conrad, 1865a, p. 9; Cossmann, 1893, p. 11

Diplodonta unguina (Conrad), Conrad, 1858b, p. 166; de Gregorio, 1890, p. 208 in part pl. 29, fig. 18 copy *rotunda* Lea; figs. 19-28; pl. 30, figs. 1-9; Dall, 1900, pp. 1015, 1181 in part; Harris, 1919, p. 127, pl. 40, figs. 10-14; Harris and Palmer, 1946, p. 85, pl. 19, figs. 11, 11a; Brann and Kent, 1960, p. 331

Diplodonta astartiformis Conrad, 1860, p. 296; Harris, 1895b, p. 6

Diplodonta deltoidea Conrad, 1860, p. 296; Harris, 1895b, p. 15

Mysia astartiformis (Conrad), Conrad, 1865a, p. 9 *astartaeformis*; Conrad, 1865c, p. 147, pl. 11, fig. 15; de Gregorio, 1890, p. 209, pl. 30, fig. 12 copy Conrad

Mysia deltoidea (Conrad), Conrad, 1865a, p. 9; Conrad, 1865c, p. 147, pl. 11, fig. 10; de Gregorio, 1890, p. 209, pl. 30, fig. 11 copy Conrad

Diplodonta (Diplodonta) unguina (Conrad), Stenzel, Krause, and Twining, 1957, p. 118

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (Harris); Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris); Clarke Co., Gosport [Bluff], Alabama R.

Types.—Probable syntypes (9), *Astarte unguina*, No. 30564 ANSP. *Diplodonta deltoidea* missing. *Diplodonta astartiformis* missing, Moore, 1962, pp. 106, 53, 41 respectively

Diplodonta unguina (Conrad), de Gregorio, 1890 in part

See *Microstagon nana* (Lea)

Diplodonta (Diplodonta) unguina yazoocola Harris**Diplodontidae**

Diplodonta unguina yazoocola Harris in Harris and Palmer, 1946, p. 85, pl. 19, figs. 9, 10, 10a; Brann and Kent, 1960, p. 331

Diplodonta (Diplodonta) unguina yazoocola Harris, Stenzel, Krause, and Twining, 1957, p. 118

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Yazoo Co., Sims Siding, 8 mi. N. of Yazoo City (type)

Types.—Syntypes, Nos. 4317, 4318, PRI

Diplodonta sp.

Diplodontidae

Diplodonta sp., Gardner, 1935, p. 176

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Medina Co., USGS sta. 11769, 5.7 mi. NW. Castroville, Quihi road

Type.—Unfigured specimen probably USNM

Diplodonta (?) sp.

Diplodontidae

Diplodonta sp. Gardner, 1935, p. 176; Stenzel, Krause, and Twining, 1957, p. 117

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

Locality.—TEXAS: Medina Co., USGS 17769, 5.7 mi. NW. of Castroville on the Quihi road

Type.—Unfigured specimen not seen. Presumably USNM

Diplodonta sp.

Diplodontidae

Diplodonta sp. Harris, 1897b, p. 65, pl. 13, fig. 7; Brann and Kent, 1960, p. 331

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

Type.—Figured specimen, No. 175 PRI

Divaricella robertsi Richards

Lucinidae

Divaricella robertsi Richards in Richards and Palmer, 1953, p. 49, pl. 9, fig. 7

Range.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

Locality.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock, just SW. of State Road 55, SW. ¼ sec. 34, T. 14 S., R. 16 E. (type)

Type.—Holotype, No. I-7567 Fla. Geol. Sur.

Donax acutangula Aldrich

Donacidae

Donax acutangula Aldrich, 1921, p. 22, pl. 3, fig. 12

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 47 GSATC

Donax (Egerella) donacea (Conrad)

See *Egerella limatula* (Conrad)

Donax fragilis Conrad *nomen nudum* Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 378; Dall, 1900, p. 964 as *Egerella*

Donax limatula Conrad

See *Egerella limatula* (Conrad)

See also *Egerella subtrigonia* (Lea)

Donax plana (Lea), de Gregorio, 1890

See *Tellina leana* Dall

See also *Tellina* (*Angulus*) *plana* (Lea)

Donax (*Egerella*) *veneriformis* (Lea)

See *Egerella subtrigonia* (Lea)

Donax (*Egerella*) *veneriformis tiga* de Gregorio

See *Egerella limatula* (Conrad)

Dosinia lenticularis (Rogers and Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

Dosinia mercenaroidea Aldrich

See *Mercimonia* ? *mercenaroidea* (Aldrich)

Dosiniopsis (*Pelecypora*) *hatchetigbeensis* (Aldrich)

See *Pelecypora hatchetigbeensis* (Aldrich)

Dosiniopsis lenticularis (Rogers and Rogers)

Veneridae

Cytherea lenticularis Rogers and Rogers, 1839b, p. 372, pl. 28, fig. 1 (2 figs); Rogers reprint, 1884, p. 669, pl. 3, fig. 1 (2 figs.); H. C. Lea, 1849, p. 99 [not Conrad]

Artemis lenticularis [sic] (Rogers and Rogers), Conrad, 1853b, p. 320

Meretrix lenticularis (Rogers and Rogers) [not Conrad], Conrad, 1854, p. 30

Dosinia lenticularis (Rogers and Rogers), Conrad, 1854, p. 30

Cytherea eversa Conrad, Tuomey, 1858, p. 271; not *Cytherea eversa* Conrad, 1845b, p. 174

Dosiniopsis lenticularis (Rogers and Rogers), Conrad, 1864, p. 213; Conrad, 1865a, p. 6; Conrad, 1866a, p. 6; Conrad, 1866c, p. 100; Tryon, 1884b, p. 178, pl. 115, fig. 38; Aldrich, 1886, p. 57; Harris, 1894a, p. 302; Clark, 1895, p. 5; Clark, 1896, p. 78 includes *meekii*, pl. 18, figs. 1a-g; Harris, 1897b, p. 64, pl. 12, fig. 13; Clark and Martin, 1901, p. 171 includes *meekii*, pl. 32, figs. 1a-g; Dall, 1903a, p. 1225; Shimer and Shrock, 1944, p. 427, pl. 170, figs. 13-15 copy Clark and Martin; Palmer, 1927/1929, p. 6, pl. 1, figs. 3, 11, 16; Vokes, 1961, p. 50, pl. 10, figs. 7-9; Brann and Kent, 1960, p. 342

Range.—Paleocene. Aquia fm. (type). Lower Eocene. Middle Wilcox [Sabine] gr.

Localities.—VA.: "eastern Virginia." (type); *Stafford Co.*, Aquia Cr. MD.: *Prince Georges Co.*, Fort Washington; 1 mi. NE. of Piscataway; Brooks Estate near Seat Pleasant; Upper Marlboro; *Charles Co.*, Glymont; Clifton Beach; Liverpool Point; Mattawoman Creek; Reedy Run (branch of Chickomuxen Creek); 3 mi. W. of Pesgah; *Ann Arundel Co.*, Sheckel's Farm near South R., 1 mi. W. of Hardesty; *Kent Co.*, Harrison's Ldg., Chester R.; *Cecil Co.*, Fredericktown; [?] *Co.*, 1 mi. NE. of Grimesville. ALA.: *Monroe Co.*, Bells Ldg., Alabama R. GA.: *Clay Co.*, Fort Gaines

Type.—Holotype. Unknown

Dosiniopsis lenticularis meekii Conrad

Veneridae

Dosiniopsis meekii Conrad, 1864, p. 213, text fig.; Conrad, 1865a, p. 6; Conrad, 1866a, p. 6; Conrad, 1866c, p. 100; Dall, 1902, p. 345; Stewart, 1930, p. 251

Dosiniopsis lenticularis meekii Conrad, Harris, 1894a, p. 302; Dall, 1903a, p. 1225; Palmer, 1927/1929, p. 7, pl. 1, figs. 8, 10, 13, 14; Brann and Kent, 1960, p. 342

Range.—Paleocene. Aquia fm. (type)

Locality.—MD.: Prince Georges Co., 6 mi. E. of Washington, D. C. (type). VA.: Stafford Co., mouth of Potomac Creek

Type.—Missing ANSP Moore, 1962, p. 74

Dosiniopsis meekii Conrad

See *Dosiniopsis lenticularis meekii* Conrad

Eburneopecten calvatus (Morton)

Amusiidae

Pecten calvatus Morton, 1833b, p. 130, pl. 10, fig. 3; Morton, 1834, p. 58, pl. 10, fig. 3; Conrad, 1834, p. 122; Morton, 1842a, p. 216; Conrad, 1842b, p. 174; Ravenel, 1844, p. 97; Gibbes, 1845, p. 254; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 14; Hopkins, 1871, pp. 12, 17; Heilprin, 1882a, p. 416; Vaughan, 1896, p. 50; Harris, 1919, p. 28; Stenzel, Krause, and Twining, 1957, p. 85 under *Eburneopecten*

Camptonectes calvatus (Morton), Conrad, 1866a, p. 3

Pecten (Pseudamussium) calvatus Morton, de Gregorio, 1890, p. 181 in part, pl. 21, fig. 28 type; Dall, 1898b, p. 752 in part = *P. scintillatus corneoides* Harris, 1919 *fide* Harris, 1919, p. 28

Pseudamussium calvatum (Morton), Cossmann, 1893, p. 18

Tariamussium ? calvatum (Morton), Sacco, 1897c, p. 50

Aequipecten (Cyclopecten) calvatus (Morton), Teppner, 1922, p. 220

Amussium (Pseudamussium) calvatus (Morton), Tucker-Rowland, 1938, p. 64, pl. 4, figs. 26-28; pl. 6, fig. 7 type

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *fide* Cooke and MacNeil, 1952, p. 20

Locality.—S.C.: Orangeburg Co., Eutaw Springs (type)

Type.—Holotype (monotype), ANSP

Eburneopecten corneoides (Harris)

Amusiidae

Not *Pecten claibornensis* Harris, 1894b, p. 145

Pseudamussium claibornense Harris, 1897b, p. 43, pl. 7, fig. 1 not of Conrad, 1866a, p. 23 (as *Camptonectes*); Brann and Kent, 1960, p. 741

Pecten scintillatus var. *corneoides* Harris, 1919, p. 28, in part, not pl. 15, figs. 15, 16; Brann and Kent, 1960, p. 669 not p. 670 = *Eburneopecten* sp.

Pecten (Pseudamussium) scintillatus Conrad, Dall, 1898b, p. 753 in part

Amussium (Pseudamussium) corneoides (Harris), Tucker-Rowland, 1938, p. 65 in part, not pl. 5, fig. 13 not cotype; not pl. 6, fig. 11 not cotype

Eburneopecten corneoides (Harris), Stenzel, Krause, and Twining, 1957, p. 85

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

Type.—Holotype, No. 185 PRI

Eburneopecten dalli (Clark)

Amusiidae

Pecten Rogersi Clark, 1895, p. 5; Clark, 1896, p. 85, pl. 34, figs. 2a-c

Pecten (Pseudamussium) frontalis Dall, 1898b Apr., p. 753 [new name for *P. rogersi* Clark, not *P. Rogersi* Conrad, 1834] in part. Paleocene Chesapeake

Pecten dalli Clark, 1898 Nov., p. 18 new name, not *P. Rogersi* Conrad, 1834, p. 151; Clark and Martin, 1901, p. 188, pl. 44, figs. 7, 7a, 7b holotype

Aequipecten (*Pseudamussium*) *frontale* (Dall), Teppner, 1922, p. 210 in part. See *Eburneopecten frontalis* (Dall)

Range.—Paleocene. Aquia fm. (type). Lower Eocene. Nanjemoy fm. (Clark and Martin)

Localities.—VA.: *Stafford Co.*, Potomac Cr. (type); *King George Co.*, Woodstock; [?] *Co.*, "Front Royal". MD.: *Queen Annes Co.*, South East Creek (1 mi. above Chester R.); *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. Station)

Type.—Holotype, USNM

***Eburneopecten frontalis* (Dall)**

Amusiidae

Pecten (*Pseudamussium*) *frontalis* Dall, 1898b Apr., p. 753, new name for *P. rogersi* Clark, 1896, p. 85; not *P. Rogersi* Conrad, 1834, p. 151; Schuchert, et al., 1905, p. 487

Aequipecten (*Pseudamussium*) *frontale* (Dall), Teppner,* 1922, p. 210 in part

Because *E. frontalis* had the types designated from Garland Creek, Mississippi, Jackson Eocene, the best solution would be retain *E. dalli* (which see) for the Aquia Paleocene Virginia form.

Range.—Upper Eocene. Lower Jackson gr. (type)

Locality.—MISS.: *Clarke Co.*, Garland Creek near Shubuta (type)

Types.—Syntypes, No. 137832 USNM [not figured]

***Eburneopecten hamiltonensis* (Tucker)**

Amusiidae

Pecten (*Chlamys*) *clarkeanus* Aldrich, Dall, 1898b, p. 739 in part *vide* Tucker, 1934, p. 617

Pecten clarkeanus Harris, 1919, p. 25 in part, pl. 15, figs. 10-12 var.; Brann and Kent, 1960, p. 659 in part Nos. 448, 449, 450 only

Amusium (*Pseudamussium*) *hamiltonensis* Tucker, 1934, p. 617, pl. 27, fig. 1; Tucker-Rowland, 1938, p. 63, pl. 5, fig. 17

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Hamilton Bluff, Alabama R. (type). MISS.: *Tallahatchie Co.* (*Talahatchee* [sic], Miss., Tucker)

Types.—Holotype, No. 449; paratypes, 448, 450 PRI

***Eburneopecten scintillatus* Conrad**

Amusiidae

Pecten (*Eburneopecten*) *scintillatus* Conrad, 1865b, p. 140, pl. 10, fig. 4; Harris and Palmer, 1946, p. 33, pl. 9, figs. 1-8; Stenzel, Krause, and Twining, 1957, p. 84, pl. 7, figs. 16-21; pl. 10, fig. 8; Brann and Kent, 1960, p. 669; not p. 670 *P. scintillatus corneoides* "paratypes" equals *Eburneopecten* sp.

Camptonectes scintillatus (Conrad), Conrad, 1865a, p. 190+; Conrad, 1866a, p. 23

Camptonectes claibornensis Conrad, 1866a, p. 23 *nomen nudum*

Pecten scintillatus Conrad, Heilprin, 1882a, p. 417; Clark, Miller, Stephenson, Johnson, and Parker, 1912, pp. 188, 316; Harris, 1919, p. 28 in part, pl. 15, fig. 14 only; Brann and Kent, 1960, p. 668. Not Aldrich, 1886, pp. 9, 48; not de Gregorio, 1890, p. 183; not Deussen, 1924, p. 67

Pecten claibornensis (Conrad) [*nomen nudum*], Heilprin, 1882a, p. 416; de Gregorio, 1890, p. 182 subgenus *Camptonectes*; Harris, 1894b, p. 145; Harris, 1895b, p. 11; Harris, 1897a, p. 470, pl. 18, figs. 1, 2; Dall, 1898b, p. 753

Not *Pseudamussium claibornense* (Conrad), Harris, 1897b, p. 43, pl. 7, fig. 1

Pecten (*Pseudamussium* [sic]) *scintillatus* Conrad, Dall, 1898b, p. 752 in part; cf. Kellum, 1926, p. 19; cf. Harbison, 1944, pp. 3, 7, pl. 1, fig. 4

Chlamys (*Camptonectes*) *scintillatus* (Conrad), Teppner, 1922, p. 140 in part

Amusium (*Pseudamussium*) *scintillatus* (Conrad), Tucker-Rowland, 1938, p. 66 in part, pl. 5, fig. 12

Amusium (*Pseudamussium*) *corneoides* Harris, Tucker-Rowland, 1938, p. 65 in part

Eburneopecten scintillatus (Conrad), Gardner, 1939, p. 341

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—MISS.: Clarke Co., "Enterprise"—Garland Cr. [Aldrich, 1885c, p. 307]; near Shubuta; Hinds Co., Jackson

Types.—Probable syntypes (2), No. 13231 ANSP Moore, 1962, p. 95

Eburneopecten scintillatus Conrad s.l., Stenzel, Krause, and Twining, 1957, p. 85.

See *Eburneopecten* sp.

Eburneopecten subminutus (Aldrich)

Amusiidae

Pecten (*Pseudamussium*) *subminutus* Aldrich, 1903, p. 100, pl. 4, figs. 16, 17

Amusium (*Pseudamussium*) *subminutus* Aldrich, Tucker-Rowland, 1938, p. 67, pl. 6, fig. 16

Range.—Upper Eocene. Jackson gr. (Aldrich). Oligocene (type)

Localities.—MISS.: Hinds Co., Jackson (Aldrich); Wayne Co., Red Bluff [Hiwanee Station], Chickasawhay R. (type)

Type.—Holotype, No. 644632 USNM

Eburneopecten sp.

Amusiidae

Pecten (*Pseudamussium*) *scintillatus* Conrad, Dall, 1898b, p. 753 in part

Pecten scintillatus var. *corneoides* Harris, 1919, p. 28 in part, pl. 15, figs. 15, 16; Renick and Stenzel, 1931, p. 104

Pecten scintillatus Conrad, Deussen, 1924, p. 67

Amusium (*Pseudamussium*) *corneoides* Harris, Tucker-Rowland, 1938, p. 65 in part, pl. 5, fig. 13 not cotype; pl. 6, fig. 11 not cotype

Pecten scintillatus corneoides Harris, Brann and Kent, 1960, p. 670, Nos. 453, 454

Eburneopecten scintillatus Conrad s.l., Stenzel, Krause, and Twining, 1957, p. 85

Range.—Middle Eocene. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

Localities.—LA.: Winn Par., St. Maurice. ALA.: Monroe Co., Claiborne Bluff (base), Alabama R. TEXAS: Brazos Co., Little Brazos R. MISS.: Clarke Co., Wautubbee

Types.—Figured specimens, Nos. 453, 454 PRI

Egerella bucklandii LeaSee *Egerella limatula* (Conrad)*Egerella fragilis* (Conrad)See *Donax fragilis* Conrad nomen nudum*Egerella plana* (Lea)See *Tellina (Angulus) plana* (Lea)***Egerella limatula* (Conrad)****Donacidae**

Donax limatula Conrad, 1833c Nov., p. 42 (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378; Harris, 1895b, p. 24

Egeria triangulata Lea, 1833 Dec., p. 51, pl. 1, fig. 20; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378 under *Donax limatula* Conrad; Harris, 1895b, p. 46

Egeria Bucklandii Lea, 1833 Dec., p. 52, pl. 1, fig. 21; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 378 under *Donax limatula* Conrad; Harris, 1895b, p. 8

Egeria donacea Conrad, 1865a, p. 5 (as *donacia*); Conrad, 1865c, p. 146, pl. 11, fig. 12; Conrad, 1866a, p. 7 (as *donacia*); Harris, 1895b, p. 16

Egeria limatula (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7

Donax (Egerella) donacia [sic] (Conrad), de Gregorio, 1890, p. 222, pl. 35, fig. 21 copy Conrad

? *Donax (Egerella) veneriformis* var. *tiga* de Gregorio, 1890, p. 222, pl. 35, figs. 4-9

Donax (Egerella) limatula Conrad, de Gregorio, 1890, p. 222 in part, pl. 35, fig. 18 copy Lea *triangulata*, fig. 20 copy Lea *Bucklandii*; p. 223 mut. *triangulata*, mut. *Bucklandii*

Egerella triangulata (Lea), Cossmann, 1893, p. 9; Dall, 1900, p. 964; Schuchert, et al., 1905, p. 241; Harris, 1919, p. 156, pl. 48, figs. 12, 13

Psanmobia eborea error for *Egerella triangulata* Lea, Brann and Kent, 1960, p. 740, No. 1208 PRI

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes (3), No. 30536 ANSP Moore, 1962, p. 70;

Egeria donacea Conrad, syntypes (2), No. 30698 ANSP Moore, 1962, p. 55; *Egeria triangulata* Lea, holotype, No. 5096 ANSP;

Egeria bucklandii Lea, holotype, No. 5097 ANSP

Egerella subtrigonia* (Lea)*Donacidae**

Egeria subtrigonia Lea, 1833, p. 53, pl. 1, fig. 22; H. C. Lea, 1849, p. 99 *subtrigona*; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7 *subtrigona*; Harris, 1895b, p. 44

Egeria veneriformis Lea, 1833, p. 53, pl. 1, fig. 23; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1895b, p. 47

Donax (Egerella) veneriformis (Lea), de Gregorio, 1890, p. 222, pl. 35, fig. 10 copy Lea

Donax (Egerella) limatula (Conrad), de Gregorio, 1890, p. 222 in part, pl. 35, fig. 19 copy Lea *subtrigonia*, p. 223 mut.

Egerella subtrigonia (Lea), Stoliczka, 1871, pp. xvii, 133 *subtrigona*; Tryon, 1884b, p. 173, pl. 112, fig. 90; Cossmann, 1893, p. 9 in part; Dall, 1900, p. 964; Harris, 1919, p. 157, pl. 48, figs. 14-16a; pl. 49, figs. 1, 2; Brann and Kent, 1960, pp. 352, 353

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne
gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5098 ANSP

Egerella triangulata (Lea)

See *Egerella limatula* (Conrad)

Egeria Bucklandii Lea

See *Egerella limatula* (Conrad)

Egeria donacea Conrad

See *Egerella limatula* (Conrad)

Egeria inflata Lea

See *Diplodonta inflata* (Lea)

Egeria limatula Conrad

See *Egerella limatula* (Conrad)

Egeria nana Lea

See *Microstagon nana* (Lea)

Egeria nitens Lea

See *Abra* (*Abra*) *nitens* (Lea)

Egeria ovalis Lea

See *Tellina leana* Dall

Egeria plana Lea

See *Tellina* (*Angulus*) *plana* (Lea)

Egeria rotunda Lea

See *Diplodonta unguina* (Conrad)

Egeria subtrigonia Lea

See *Egerella subtrigonia* (Lea)

Egeria triangulata Lea

See *Egerella limatula* (Conrad)

Egeria veneriformis Lea

See *Egerella subtrigonia* (Lea)

Ensiculus Conradi Cossmann

See *Cultellus* (*Ensiculus*) *conradi* (Cossmann)

Entolium (*Amussium*) *ocalanum* Dall

See *Amusium ocalanum* Dall

Entolium (*Propeamussium*) *squamulum* (Lamarck), Teppner

See *Amusium* (*Propeamussium*) *squamulum* (Lamarck)

Eomiltha pandata (Conrad)

Lucinidae

Lucina pandata Conrad, 1833a, p. 343; Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Tuomey, 1858, p. 266; Conrad, 1866a, p. 6; Harris, 1895b, p. 32; Harris, 1919, p. 121, pl. 39, figs. 6, 7, 7a; Brann and Kent, 1960, p. 509

Lucina compressa Lea, 1833, p. 55, pl. 1, fig. 27; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387

under *Lucina pandata* Conrad; Tuomey, 1858, pp. 266, 274; de Gregorio, 1890, p. 206, pl. 29, fig. 1 copy Lea, figs. 2-5; Cossmann, 1893, p. 11; Harris, 1895b, p. 12 (*L. pandata* Conrad)
Cyclas pandata (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8
Phacoides (Miltha) pandatus (Conrad), Dall, 1903a, p. 1374 in part;
 ? Kellum, 1926, p. 24
Miltha (Eomiltha) pandata (Conrad), Stewart, 1930, p. 191
Eomiltha pandata Conrad, Chavan, 1938, p. 93

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). N. C.: *Craven Co.*, Rocky Ldg., Neuse R.

Types.—Possible syntypes, Nos. 30573, 30574 ANSP Moore, 1962, p. 83. Holotype *Lucina compressa* Lea, No. 5149 ANSP

Eophysema ozarkana (Harris)

Lucinidae

Lucina ozarkana Harris, 1897b, p. 72, pl. 14, figs. 7, 7a, 7b; Harris, 1899b, p. 303; Harris, 1919, p. 118, pl. 38, figs. 24, 24a, 25; Brann and Kent, 1960, pp. 508, 509 in part

Lucina subvexa Conrad, Dall, 1903a, p. 1352 in part, not p. 1353

? *Lucina dartoni* Clark, Harris, 1919, p. 118, not Clark, 1895

Loripinus ozarkanus (Harris), Stewart, 1930, p. 186

Lucina (Eophysema) ozarkana Harris, Chaven, 1951, p. 212

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Localities.—ALA.: *Dale Co.*, Ozark (type); *Clarke Co.*, Woods Bluff, Tombigbee R.

Types.—Syntypes, Nos. 226, 227 PRI

Eophysema cf. ozarkana (Harris)

Lucinidae

Lucina ozarkana Harris, 1919, p. 118, pl. 38, figs. 26, 26a; Brann and Kent, 1960, p. 509. Not Harris, 1897b, p. 72

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.; base of bluff, Claiborne, Alabama R.

Type.—Figured specimens, Nos. 757, 758 PRI

Eophysema ozarkana (Harris) ? "var."

Lucinidae

Lucina (Eophysema) ozarkana ? var., Harris in Harris and Palmer, 1946, p. 90, pl. 20, figs. 6, 6a, 7; Brann and Kent, 1960, p. 509

Range.—Upper Eocene. Lower Jackson gr.

Localities.—LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R. MISS.: *Hinds Co.*, Jackson

Types.—Figured specimens, Nos. 4334-4336 PRI

Eophysema subvexa (Conrad)

Lucinidae

Lucina subvexa Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 403, pl. 4, fig. 14; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Harris, 1895b, p. 44; Dall, 1903a, p. 1352 in part

Cyclas subvexa (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8

Lucina (*Loripes*) *subvexa* Conrad, de Gregorio, 1890, p. 207, pl. 29, fig. 14 copy Conrad; Cossmann, 1893, p. 12; Harris, 1919, p. 119 in part, pl. 39, fig. 1 copy Conrad, figs. 2, 4 see *Anodontia* ? *angustana* Gardner; not Brann and Kent, 1960, pp. 512, 513, Nos. 760, 762 see *A.* ? *angustana* Gardner. Not Harris, 1919, pl. 39, figs. 3, 5, 5a see *L. sylvaerupis* Harris

Loripinus (*Eophysema*) *subvexa* (Conrad), Stewart, 1930, p. 186 type species *Eophysema* Stewart, 1930

Anodontia ? *subvexa* (Conrad), Gardner, 1945, p. 94 in part

Lucina (*Eophysema*) *subvexa* Conrad, Harris and Palmer, 1946, pl. 20, fig. 8? Conrad type. The figure given here does not coincide with Conrad's type figure but does with description Conrad, 1846c, p. 403; Brann and Kent, 1960, p. 513

Anodontia subvexa (Conrad), Chavan, 1938, p. 123

There is doubt as to the true character of this species as well as the horizon from which it came. Unfortunately it was designated a type species.

Range.—Middle Eocene. Gosport sd. (? type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Probable holotype, No. 30501 ANSP Moore, 1962, p. 100

Eosolen lisbonensis (Aldrich)

Solenidae

Solen lisbonensis Aldrich, 1886, p. 37, pl. 4, fig. 4; de Gregorio, 1890, p. 235, pl. 38, fig. 14 copy Aldrich not Meyer as in text; Harris, 1919, p. 195, pl. 59, fig. 2 copy Aldrich

Solen sp. Harris, 1897b, p. 66, pl. 13, fig. 9; Brann and Kent, 1960, p. 805

Solen (*Plectosolen*) *lisbonensis* Aldrich, Dall, 1900, p. 953; Clark and Martin, 1901, p. 165 in part

Solena (*Eosolen*) *lisbonensis* (Aldrich), Stewart, 1930, p. 290; Gardner, 1945, p. 111

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type); McBean fm., upper Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type).

GA.: Clay Co., Fort Gaines. MISS.: Clarke Co. Md. and Va. localities questioned by Clark and Martin

Type.—Holotype, No. 638794 USNM. Not No. 6224 ANSP as in Clark and Martin

Cf. Eosolen abruptus (Dall)

Pl. 3, figs. 7, 8 Solenidae

Solen (*Plectosolen*) *lisbonensis abruptus* Dall, 1900, p. 953; Clark and Martin, 1901, p. 165 in part; Schuchert, *et al.*, 1905, p. 603

Solen lisbonensis var. *abruptus* Dall, Harris, 1919, p. 195

Solena (*Eosolen*) *lisbonensis abruptus* (Dall), Gardner, 1945, p. 111 in part

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (type)

Locality.—MISS.: Clarke Co. (type Dall). USGS Sta. 2626 "McLeods Mill on Suwanlovey Creek Clarke County Miss. 6 miles west of Desoto Station on railroad. Shoal of hard Ferugious [sic] Sand in the Creek making good mill seat. Frank Burns Coll. 1894." (USNM Cat.)

Types.—Lectotype, No. 140118; paralectotypes, Nos. 644665, 644666 USNM

The species is figured herein for the first time. Examination of the syntypes through courtesy of the USNM confirms what Dall suggested that the form is distinct from *E. lisbonensis* for the reasons he stated. No. 140118 USNM is here selected as the lectotype. Dimensions are given in the explanation of the plate.

Epilucina rotunda (Lea)

Lucinidae

Lucina symmetrica Conrad, 1833c, p. 40 not adequate; (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Harris, 1895b, p. 44

Lucina rotunda Lea, 1833, p. 56, pl. 1, fig. 28; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387 under *L. symmetrica* Conrad; de Gregorio, 1890, p. 205, pl. 29, figs. 6, 7, fig. 8 copy Lea; Cossmann, 1893, p. 11; Harris, 1895b, p. 39; Harris, 1919, p. 122, pl. 40, figs. 1, 2, 2a; Brann and Kent, 1960, p. 512. Not Aldrich, 1886, p. 50

Cyclas symmetrica (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 9
Phacoides rotundus (Lea), Dall, 1903a, p. 1364

Claibornites rotundus (Lea), Stewart, 1930, p. 183 type*species *Claibornites* Stewart, 1930

Epilucina rotunda (Lea), Chavan, 1937, p. 275

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, No. 5152 ANSP, left valve [right valve missing *fide* Harris, 1919]; *Lucina symmetrica* Conrad possible syntypes (6), No. 30522 ANSP Moore, 1962, p. 100

Epilucina sp.

Lucinidae

Lucina rotunda Lea, Aldrich, 1886, p. 50. Not Lea, 1833, p. 56

Lucina symmetrica ? Conrad, Harris, 1897b, p. 71, pl. 14, fig. 4; Brann and Kent, 1960, p. 513

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R.

Type.—Figured specimen, No. 225 PRI

Ervilia lignitica Aldrich

Mesodesmatidae

Ervilia lignitica Aldrich, 1921, p. 21, pl. 3, figs. 8, 9

Range.—Lower Eocene. Bells Ldg. mem. (type) Tuscahoma fm., middle Wilcox [Sabine] gr.; Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type); Greggs Ldg., Alabama R.

Type.—Holotype, No. 17 GSATC

Ervilia lignitica wheeleri Aldrich

Mesodesmatidae

Ervillia [sic] *lignitica* var. *wheeleri* Aldrich, 1931, p. 9

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 71 GSATC

Ervilia meyeri Aldrich**Mesodesmatidae**

Ervilia meyeri Aldrich, 1911, p. 5, pl. 1, fig. 7; Harris, 1919, p. 174, pl. 52, fig. 16 copy Aldrich

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: [? Co.], "Claiborne Sand bed, Tombigbee River"

Type.—Holotype, No. 6391165 USNM

Erycina aequorea Conrad

See *Mactropsis aequorea* (Conrad)

Erycina plicatula Dall**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Erycina plicatula Dall, 1899, p. 883 listed only; Dall, 1900, p. 1143, pl. 44, figs. 7, 12; Schuchert, et al., 1905, p. 248; Harris, 1919, p. 107, pl. 37, figs. 7, 8 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, No. 137389 USNM

Erycina rectilinearis Conrad

See *Mactropsis rectilinearis* (Conrad)

Erycina whitfieldi Meyer**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Erycina whitfieldi Meyer, 1886b, p. 82, pl. 1, fig. 29; Meyer, 1887a, p. 11 in part, not pl. 2, fig. 8; de Gregorio, 1890, p. 210, pl. 30, fig. 15 copy Meyer; Cossmann, 1893, p. 12; Dall, 1899, p. 883; Dall, 1900, p. 1143; Harris, 1919, p. 107, pl. 37, fig. 9 copy Meyer, 1886b; Harris and Palmer, 1946, p. 84 in part, not pl. 19, fig. 7, Meyer specimen not type as stated.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne fm.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638849 USNM

Erycina whitfieldi Meyer in part

See *Erycina zitteli* Meyer

Erycina whitfieldi meyeri Cossmann**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Erycina Whitfieldi Meyeri Cossmann, 1893, p. 12; Dall, 1899, p. 883; Dall, 1900, p. 1143

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 11510, Lab. Géol., Sorbonne, Paris

Erycina zitteli Meyer**Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Erycina zitteli Meyer, 1887a, p. 11, pl. 2, fig. 9; Dall, 1899, p. 883; Dall, 1900, p. 1143; Harris and Palmer, 1946, p. 84, pl. 19, fig. 8 type *Erycina whitfieldi* Meyer, Meyer, 1887a, p. 11 in part, pl. 2, fig. 8; Harris and Palmer, 1946, p. 84 in part, pl. 19, fig. 7 Meyer specimen but not type as stated.

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, No. 638889 USNM. Holotype *E. Whitfieldi* Meyer, 1887a, pl. 2, fig. 8 = No. 638888 USNM

***Etea delawarensis* (Gabb) Arctiidae (also placed in Pleurophoridae)**

Crassatella delawarensis Gabb, 1860a, p. 303, pl. 48, fig. 20; Whitfield, 1885, p. 210, pl. 27, figs. 14-15

Etea delawarensis (Gabb), Conrad, 1877, p. 275; Weller, 1907, p. 546, pl. 59, figs. 8, 9; Richards in Richards, *et. al.*, 1958, p. 177, pl. 28, fig. 4; pl. 29, fig. 11; pl. 31, fig. 1

Range.—Upper Cretaceous (type ?). Lower Eocene. Manasquan fm.

Localities.—N.J.: *Burlington Co.*, Crosswicks ? (type) [Cretaceous locality] Pemberton; *Camden Co.*, Clementon; *Monmouth Co.*, near Farmingdale; well at Interlaken [Eocene localities]

Type.—Holotype, No. 18733 ANSP

? "***Euloxa***" sp. *Incerta sedes*

Veneridae

Euloxa sp., Harris, 1951, pp. 17, 18, pl. 8, figs. 1, 2; Nicol, 1953, p. 57 not *Euloxa*; Brann and Kent, 1960, p. 381

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: *Marion Co.*, Ocala Lime Rock Corp., E. of Kendrick

Type.—Figured specimen, No. 24480 PRI

***Exputens ocalensis* (MacNeil)**

? **Vusellidae**

Vulsella ocalensis MacNeil, 1934, p. 429, figs. 5-11, 431; Harris, 1951, p. 14, pl. 6, figs. 7, 7' copy MacNeil

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—FLA.: *Sumpter Co.*, Sumpter Rock Co. Quarry, about 2 mi. NE. of Sumpterville; *Alachua Co.*, Cummer Lumber Co., 1¼ mi. S. of Newberry

Types.—Lectotype herein designated, No. 373052 USNM, figs. 10, 11; paratype, No. 373052 USNM, figs. 5, 6; paratype, No. 373053 USNM, figs. 7-9 [lectotype designated from original "cotypes" = syntypes, "cotypes" and paratype not possible in same classification.]

Fabella oblonga Aldrich

See *Sportella oblonga* (Aldrich)

Felaniella nana (Lea)

See *Microstagon nana* (Lea)

Fimbria claiborensis (Dall), Richards

See *Corbis lirata* (Conrad)

***Fimbria olssoni* Richards**

Fimbriidae (Corbidae)

Fimbria olssoni Richards in Richards and Palmer, 1953, p. 51, pl. 11, fig. 1

Range.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr.
Locality.—FLA.: Levy Co., New Lebanon dolomite pit SW. $\frac{1}{4}$
 NE. $\frac{1}{4}$ sec. 12, T. 16 S., R. 16 E. (type)
Type.—Holotype, No. I-7558 Fla. Geol. Sur.

Fimbria vernoni Richards**Fimbriidae** (Corbidae)

Fimbria vernoni Richards in Richards and Palmer, 1953, p. 50, pl. 11,
 figs. 2-4

Range.—Upper Eocene. Inglis fm. (type), lower Ocala gr.
Localities.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits
 of town of Gulf Hammock just SW. of State Road 55, SW. $\frac{1}{4}$
 sec. 34, T. 14 S., R. 16 E. (type); Withlacoochee R. at dam
 Florida Power Corp., SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 8, T. 17 S., R. 17 E.
Types.—Holotype, I-7556; paratype, I-7557 Fla. Geol. Sur.

Fistulana elongata Deshayes, Conrad

See *Gastrochaena larva* (Conrad)

Fistulana larva Conrad

See *Gastrochaena larva* (Conrad)

Flexopecten anatis (Morton)

Pl. 1, fig. 3

Pectinidae

Pecten anatis Morton, 1833a, p. 293, pl. 5, fig. 4; Morton, 1834, p.
 58, pl. 5, fig. 4; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 393;
 Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; Heilprin, 1882a, p. 417,
 Oligocene; de Gregorio, 1890, p. 181, pl. 21, fig. 29 copy Morton;
 Cooke, 1926a, p. 282, pl. 97, fig. 2

Pallium anatis (Morton), Cossmann, 1893, p. 18

Pecten (Nodipecten) anatis (Morton), Dall, 1898b, p. 730; Dall,
 1916, p. 492 in part under subgenus *Chlamys*

Not *Chlamys (Flexopecten) anatis* (Morton), Ugolini, 1903, pp.
 77-94. See Teppner, 1922, p. 191

Aequipecten (Nodipecten) anatis Morton, Teppner, 1922, p. 199

Chlamys (Chlamys) anatis (Morton), Tucker-Rowland, 1936b, p.
 1004, pl. 7, fig. 2; pl. 10, fig. 13 holotype not "St. Stephens Bluff."

Chlamys anatis (Morton), Harris, 1951, p. 10, pl. 5, fig. 2

Range.—Upper Eocene. Jackson gr. (type); "Ocala ls.", Ocala
 gr. Oligocene. Vicksburg gr. (Cooke, 1926a)

Localities.—ALA.: Monroe Co., "overlying limestone at Claiborne"
 (type). If this species is present in the Vicksburg (see Cooke,
 1926a) one would question whether the type was in place when
 found. FLA.: Jackson Co., Marianna Limestone Products Co.,
 sec. 23, T. 5 N., R. 11 W., J-5 (Harris, 1951; Wayne Moore,
 1955, p. 36)

Type.—Holotype, No. 12575 ANSP

Gafrarium distans (Conrad)

See *Corbis undata* Conrad

Gafrarium liratum Conrad

See *Corbis lirata* (Conrad)

Gari (Gobraeus) blainvillii (Lea)Pl. 3, fig. 3 **Gariidae**

Solecurtus Blainvillii Lea, 1833, p. 39, pl. 1, fig. 7; H. C. Lea, 1849, p.
 106, *Blainvillii*; de Gregorio, 1890, p. 235, pl. 33, fig. 21 copy Lea;
 Harris, 1895b, p. 8

Gari (*Psammocola*) *Blainvillii* (Lea), Conrad, 1865a, p. 4
Psammobia eborea (Conrad), Heilprin, 1884b, p. 90 in part
Solenocurtus [sic] *Blainvillei* [sic] (Lea), Cossmann, 1893, p. 5, pl. 1, figs. 2, 3
Psammobia (*Gobraeus*) *blainvillei* (Lea), Dall, 1898c, p. 60
Psammobia Blainvillei (Lea), Dall, 1900, pp. 959, 976, 977
Psammobia blainvillei (Lea), Harris, 1919, p. 155, pl. 48, fig. 6 copy
 Lea

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5021 ANSP

Gari cerasium (Dall), Harris, 1951 not *Psammobia cerasia* Dall, 1916, p. 501
 See *Gari* sp.

Gari eborea (Conrad)

Gariidae

Psammobia eborea Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 105; d'Orbigny, 1850, p. 377 as *Tellina*; Heilprin, 1884b, p. 90 in part; Cossmann, 1893, p. 9; Harris, 1895b, p. 17; Dall, 1900, pp. 976-978 *Gobraeus*; Harris, 1919, p. 156, pl. 48, figs. 8-11; Brann and Kent, 1960, p. 740 not No. 1208=*Egerella triangulata* Lea

Psammobia (*Psammocola*) *eborea* Conrad, de Gregorio, 1890, p. 226

Solecurtus Blainvillii Lea, de Gregorio, 1890, p. 235 in part

Gari (*Psammocola*) *eborea* (Conrad), Conrad, 1865a, p. 4 *Gari eborea* (Conrad), Harris and Palmer, 1946, p. 97, pl. 21, figs. 10, 11 (as *eboreum*); Brann and Kent, 1960, p. 400

Gari sp. cf. *G. eborea* (Conrad), Gardner, 1945, p. 109 in part

? *Psammobia* cf. *eborea* Conrad, Richards, 1948, p. 2, pl. 2, fig. 11; Richards, 1950, p. 15

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.; middle Eocene N.C. (Richards)

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). N.C.: Johnston Co., Clayton (Richards) (compared)

Types.—Syntypes (2), No. 30530 ANSP, Moore, 1962, p. 56

Gari filosa (Conrad)

See *Garum filosa* (Conrad)

Gari harrisi (Aldrich)

Gariidae

Psammobia harrisi Aldrich, 1921, p. 24, pl. 3, figs. 19, 20

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type)

Type.—Holotype, No. 54 GSATC

Gari jacksonensis Harris

Gariidae

Gari jacksonensis Harris in Harris and Palmer, 1946, p. 97, pl. 21, figs. 12, 13, 14; Richards and Palmer, 1953, p. 53, pl. 12, fig. 4; Brann and Kent, 1960, p. 400

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Inglis fm., lower Ocala gr. (Fla.)

Localities.—LA.: Grant Par., Montgomery, Red R. (type). FLA.: Levy Co., Florida Power Corp., Withlacoochee R., SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 8, T. 17 S., R. 17 E. (Richards)

Types.—Holotype, No. 4353; paratypes, Nos. 4354, 4356 PRI

Gari (Gobraeus) ozarkana (Harris)

Gariidae

Psammobia ozarkana Harris, 1897b, p. 65, pl. 12, fig. 14; pl. 13, fig. 8;

Brann and Kent, 1960, p. 741

Psammobia (Gobraeus) ozarkana Harris, Dall, 1898c, p. 60

Gari ozarkanum (Harris), Harris and Palmer, 1946, p. 98, pl. 21, fig. 13a; Brann and Kent, 1960, p. 401

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Dale Co., Ozark (type)

Types.—Syntypes, No. 169, 176 PRI

Gari smithi (Aldrich)

Gariidae

Psammobia Smithi Aldrich, 1921, p. 23, pl. 3, figs. 17, 18

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Types.—Syntypes, No. 53 GSATC

Gari sp.

Gariidae

Gari cerasium (Dall), Harris, 1951, p. 24, pl. 13, fig. 5. Not *Psammobia cerasia* Dall, 1916, p. 501

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: Marion Co., SW. of mill and office of Dixie Lime Products Company, Reddick

Type.—Figured specimen, No. 24522 PRI [Reference omitted in Brann and Kent, 1960]

Garum claibornense* Dall

Pl. 3, figs. 4, 5 **Gariidae**

Psammobia (Garum) claibornensis Dall, 1898c, p. 60 *nomen nudum*;

Dall, 1900, p. 978; Harris, 1919, p. 155 in description of Conrad's

P. filosa; Vokes, 1956a, p. 763

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, probably one of the two probable syntypes of *Psammobia [Garum] filosa* Conrad, ANSP, Moore, 1962, p. 61. Dall (1900, p. 978) stated, "On the same card with Conrad's type in the collection of the Academy of Natural Sciences is another shell . . . I would propose the name of *Psammobia (Garum) claibornensis*."

Garum filsum (Conrad)

Pl. 3, fig. 1 **Gariidae**

Psammobia filosa Conrad, 1833c, p. 42 (Harris reprint, 1893 p. 68);

Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 105; Harris,

**Garum*, Latin, neuter

1895b, p. 19; Dall, 1900, pp. 976, 977; Harris, 1919, p. 155, pl. 48, fig. 7 type; de Gregorio, 1890, p. 225 sp. dub.; Cossmann, 1893, p. 9 *Tellina subfilosa* d'Orbigny, 1850, p. 377 new name by D'Orbigny for *Psammobia filosa* Conrad when the species was moved to *Tellina* by D'Orbigny. Not *Tellina filosa* James de Carle Sowerby, 1823, p. 143 pl. 402, fig. 2. The species is not a *Tellina* so the change is not necessary.

Gari filosa (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8

Psammobia (Garum) filosa Dall, 1898c, p. 60

Garum filosa (Conrad), Vokes, 1956a, pp. 762, 763 designated type species Dall, 1898c, p. 60, not Dall, 1900, p. 975

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (2), No. 30526 ANSP, Moore, 1962, p. 61. One of these syntypes may be the type of *G. claibornense* Dall. See his description.

Gastrochaena americana Gabb

See *Kummelia americana* (Gabb)

Gastrochaena cimitariopsis Harris

Gastrochaenidae

Gastrochaena cimitariopsis Harris, 1896, p. 70, pl. 6, fig. 13; Brann and Kent, 1960, p. 401

Gastrochaena (Spengleria ?) cimitariopsis Harris, Dall, 1898b, p. 824

Range.—Paleocene. Midway gr. (type)

Locality.—GA.: Clay Co., Fort Gaines, Chattahoochee R. (type)

Type.—Holotype, No. 80 PRI

Gastrochaena Dalli ("Harris"), in Dall, 1898b, pp. 820, 824 error for *dalliana* Harris, 1896 (*Martesia*). *Nomen nudum*

See *Gastrochaena dalliana* (Harris)

Gastrochaena dalliana (Harris)

Gastrochaenidae

Martesia dalliana Harris, 1896, p. 71, pl. 6, fig. 15; Brann and Kent, 1960, p. 534

Gastrochaena dalli [sic] (Harris), Dall, 1898b, pp. 820 (as *Martesia*), p. 824 error for *dalliana*

Range.—Paleocene. Midway gr. (type)

Locality.—GA.: Clay Co., Chattahoochee R., N. of Sandy Creek (type)

Type.—Holotype, No. 77 PRI

Gastrochaena gainesensis Harris

Gastrochaenidae

Gastrochaena gainesensis Harris, 1896, p. 70, pl. 6, figs. 12, 12a; Dall, 1898b, p. 824; Brann and Kent, 1960, p. 401

Range.—Paleocene. Midway gr. (type)

Locality.—GA.: Clay Co., Fort Gaines, Chattahoochee R. (type)

Types.—Syntypes, Nos. 78, 79 PRI

Gastrochaena larva (Conrad)

Gastrochaenidae

Fistulana elongata Deshayes, Conrad, App. in Morton, 1834, p. 8; Conrad, 1842b, p. 175 footnote "in the sand" Claiborne. Not *F. elongata* Deshayes, 1824, p. 15

- Gastrochaena elongata* (Deshayes), d'Orbigny, 1850, p. 375
Fistulana larva Conrad, 1846b, p. 212, pl. 2, fig. 5, not pl. 1 as in text;
 H. C. Lea, 1849, p. 99; Harris, 1895b, p. 23
Gastrocheana larva (Conrad), Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; de Gregorio, 1890, p. 236, pl. 38, fig. 24 copy Conrad; Cossmann, 1893, p. 5; Aldrich, 1895b, p. 19, pl. 5, fig. 12; Dall, 1898b, p. 824; Harris, 1919, p. 197, pl. 59, figs. 11 copy Aldrich, fig. 12 copy Conrad

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Possible holotype (broken), No. 15883 ANSP, Moore, 1962, p. 68

***Gastrochaena mississippiensis* Harris**

Gastrochaenidae

Gastrochaena mississippiensis Harris in Harris and Palmer, 1946, p. 120, pl. 25, figs. 7-11; Brann and Kent, 1960, p. 401

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Town Creek, Jackson (type)

Type.—Holotype, No. 4428 (right valve); No. 4429 (left valve)
 PRI

***Gastrochaena striatula* Aldrich**

Gastrochaenidae

Gastrochaena striatula Aldrich, 1903a, p. 20, fig. 2

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type).

Type.—Holotype, No. 38 GSATC

Gastrochaena subbipartita Meyer, 1887a p. 12; de Gregorio, 1890, p. 236; Cossmann, 1893, p. 5; Dall, 1898b, p. 824 is a *nomen nudum*. Meyer did not describe or figure the species. No specimen in USNM

***Gastrochaena* sp.**

Gastrochaenidae

Gastrochaena sp. Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, fig. 6; Clark and Martin, 1901, p. 161, pl. 30, fig. 5

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: Prince Georges Co., Upper Marlboro. VA.: Stafford Co., Aquia Cr. (type)

Type.—Figured specimen, USNM

***Gastrochaena* sp.**

Gastrochaenidae

Gastrochaena sp. Harris, 1896, [no. p.], pl. 6, fig. 14; Brann and Kent, 1960, p. 401

Range.—Paleocene. Midway gr.

Locality.—GA.: Clay Co., Fort Gaines

Type.—Figured specimen, No. 81 PRI

***Gastrochaena* sp.**

Gastrochaenidae

Gastrochaena sp. Kellum, 1926, p. 24, pl. 3, fig. 8

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Locality.—N.C.: New Hanover Co., Wilmington

Type.—Figured specimen, No. 352258 USNM

Gastrochaena sp.**Gastrochaenidae**

Gastrochaena sp. Meyer, 1887a, p. 12, pl. 2, figs. 10, 10a, not figs. 11, 11a, 11b as stated in text; de Gregorio, 1890, p. 236, pl. 38, figs. 22, 23 copy Meyer; Harris, 1919, p. 198, pl. 59, figs. 14, 15 copy Meyer

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R.

Type.—Figured specimen, No. 638891 USNM

Gemma sanctimauricensis Harris**Veneridae**

Gemma sancti-mauricensis Harris, 1919, p. 152, pl. 47, figs. 14, 15; Palmer, 1927/1929, p. 205, pl. 43, figs. 3, 7; Brann and Kent, 1960, p. 403

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: "Sabine River?" Harris (Veatch Survey, 1902, p. 129) (type)

Type.—Holotype, No. 1197 PRI

Gigantostrea sylvaeurupis (Harris)**Ostreidae**

Ostrea compressirostra Say, Tuomey, 1850, p. 146; Smith, E. A. and Johnson, L. C., 1887, p. 44. Not *O. compressirostra* Say, 1824b

Ostrea carolinensis Conrad, 1865f, p. 71; Conrad, 1865h, p. 266, not Conrad, 1832b, p. 27

Ostrea (probably *O. thirsae* Gabb), Aldrich, 1886, p. 53

Ostrea trigonalis var. *sylvaeurupis* Harris, 1897b, p. 38, pls. 4, 5; pl. 6, figs. 3, 3a, 4; Brann and Kent, 1960, p. 643

Ostrea percrassa Conrad, Dall, 1898b, p. 683 in part; not *Ostrea percrassa* Conrad, McLean, 1956, p. 307 in chart

Ostrea sylvaeurupis Harris, Barry, 1942+, p. 54, pl. 5, fig. 1

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); 3 mi. SW. of Thomasville; near mouth of Bashi Cr. TEXAS: Sabine Co., RR. cut in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 11, T. 6 N., R. 11 W., N. of fire tower. LA.: Sabine Par., hillside on Mitchell farm in SE. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 5, T. 6 N., R. 10 W.

Types.—Syntypes, Nos. 135, 136, 214 PRI.

Gigantostrea trigonalis (Conrad)**Ostreidae**

Ostrea trigonalis Conrad in Wailes, 1854, p. 289, pl. 14, fig. 10 (reprint 1939, p. 19, pl. 1, fig. 10); Conrad, 1856a, p. 259 (reprint, 1939, p. 5); Heilprin, 1884c, p. 311; Dall, 1898b, p. 681 in part; Cooke, 1926a, p. 274, pl. 96, fig. 3; Kellum, 1926, p. 17; Semmes, 1929, fig. 62-3; Shimer and Shrock, 1944, p. 397 in part, pl. 154, not figs. 19, 20 copy Glenn, 1904, Miocene; Gardner, 1945, p. 83 in part; Harris and Palmer, 1946, p. 21, pl. 4, figs. 1-6; cf. Richards, 1950, p. 18; cf. Harris, 1951, p. 7, pl. 2, figs. 4, 5; Brann and Kent, 1960, pp. 642, 643

Ostrea pandaeformis Gabb, 1862a, p. 328

Ostrea tuomeyi Conrad, 1865g, p. 184; Heilprin, 1884c, p. 311; de Gregorio, 1890, p. 176; Cossmann, 1893, p. 18

Ostrea mortonii Gabb, Aldrich, 1887, p. 79 not Gabb, 1862a

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type). ALA.: *Choctaw Co.*, Fail P.O.; *Cocoa P.O.*; *Turks Cave* *vide* Dall. LA.: *Grant Par.*, Creole Bluff, Montgomery, Red. R. Cf. N.C.: *Duplin Co.*, 2 mi. S. of Kornegay; *Wayne Co.*, Broadhurst Bridge. Cf. FLA.: *Marion Co.*, Dixie Lime Products, Reddick

Types.—Holotype, No. 13184 ANSP, Moore, 1962, p. 104. *Ostrea tuomeyi* Conrad, missing ANSP, Moore, 1962, p. 105

G. trigonalis has been confused with Miocene shells since Dall, 1898b, extended the range beyond a reasonable stratigraphic development. Glenn, (1904, p. 381, pl. 101, figs. 1a, b) included the species in the Choptank Miocene of Maryland and figured a specimen. Gardner (1927, p. 42) and Vokes (1961, p. 10) followed the same inclusion in the Miocene. The Miocene record needs clarification for undoubtedly there is a confusion of species. Harris in Harris and Palmer, 1946 (pp. 21-24) gave a detailed discussion of the species. It is an upper Eocene form. As Harris (1946) stated, "This is a large characteristic oyster of the Jackson beds of the Mississippi Embayment area. It may be expected from central Louisiana to Alabama in both the Garland Creek and Zeuglodon horizons . . .". It is unfortunate that the species has been included in the Miocene.

Glossus ? conradi (Gabb)

Glossidae

Isocardia conradi Gabb, 1860d, p. 393, pl. 68, figs. 21, 21a; Whitfield, 1885, p. 200, pl. 26, figs. 3, 4 type; Whitfield, 1899, p. 159; Johnson, 1905, p. 15; Weller, 1907, p. 599, pl. 66, figs. 13, 14 type

Glossus conradi (Gabb), Gabb, 1861, p. 186; Meek, 1864, p. 12

Range.—Lower Eocene. Vincentown fm. (type)

Locality.—N.J.: boundary between Gloucester and Camden Cos., Timber Creek (type)

Type.—ANSP (Johnson, 1905)

Glossus filossus Conrad

See *Glycymeris filosa* (Conrad)

Glossus fillosus [sic] Conrad

See *Glycymeris filosa* (Conrad)

Glossus mediavia (Harris)

Glossidae

Isocardia mediavia Harris, 1896, p. 66, pl. 6, fig. 5; Dall, 1900, p. 1066; Brann and Kent, 1960, p. 459

Range.—Paleocene. Clayton fm., lower Midway gr.; Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.; Naheola fm., upper Midway gr.

Localities.—ALA.: *Wilcox Co.*, 1 mi. N. Midway; Matthews Ldg., Alabama R. (type); *Sumter Co.*, Black Bluff, Tombigbee R.

Type.—Holotype, No. 69 PRI

Glossus ? vetus (Conrad)

Glossidae

Bucardia veta Conrad, 1869b, p. 41, pl. 1, fig. 2 not 3 as in Whitfield Not *Caryatis ? veta* Whitfield, 1885, p. 218, pl. 28, figs. 16-19 in part "*Bucardia*" *veta* Conrad, Dall, 1900, p. 1066

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Shark R. (type)

Type.—Missing, ANSP, Moore, 1962, p. 107

Glycimeris [sic] *elongata* (Conrad)

See *Panopea elongata* Conrad

Glycimeris [sic] *porrectoides* (Aldrich), de Gregorio

See *Panopea porrectoides* Aldrich

Glycymeridae=Glycymerididae

Glycymeris alabama Harris

See *Panopea alabama* (Harris)

Glycymeris cf. *anteparilis* Kellum, Harris, 1951

See *Glycymeris* sp.

Glycymeris arctata cookei Dall

See *Glycymeris* sp. Harris, 1951

Glycymeris conradi (Whitfield)

Glycymerididae

Axinea Conradi Whitfield, 1885, p. 230, pl. 29, figs. 10, 11; Whitfield, 1899, p. 154

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: Monmouth Co., Shark R. (type)

Type.—Holotype, No. 7804, State Mus., Trenton, N.J.

Glycymeris deltoideus ignus (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

Glycymeris deltoideus precuneata (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

Glycymeris deltoideus striatus (de Gregorio), Harris, 1919, p. 201 variation

See *Glycymeris trigonella* (Conrad)

Glycymeris filosa (Conrad)

Glycymerididae

Glossus filiosus Conrad in Wailes, 1854, p. 289, pl. 14, fig. 8 as *filiosus* (reprint 1939, p. 19, pl. 1, fig. 8); Conrad, 1856a, p. 259 (reprint 1939, p. 9); Hilgard in Hopkins, 1871, p. 11

Axinaea filosa (Conrad), Conrad, 1858b, p. 166; Conrad, 1866a, p. 23

Axinaea inequistris Conrad, 1865b, p. 139, pl. 10, fig. 12; Conrad, 1866a, p. 23

Axinaea duplistria Conrad, 1865b, p. 139, pl. 10, fig. 19; Conrad, 1866a, p. 23

Glycymeris filosa (Conrad), Dall, 1898b, p. 607; Dall, 1900, p. 1066; Harris and Palmer, 1946, p. 49, pl. 12, figs. 1-3; Brann and Kent, 1960, p. 423

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: Hinds Co., Jackson (type); Town Creek, Jackson; Clarke Co., "Enterprise"—Garland Cr. *vide* Aldrich, 1885c, p. 307 (*Axinaea inequistris* and *A. duplistria*). LA.: Grant Par., Montgomery, Red. R.

Types.—Syntypes (4), No. 13181 ANSP, Moore, 1962, p. 61. *Axinaea duplistria* Conrad, holotype, No. 13228 ANSP, Moore, 1962, p. 56. *Axinaea inequistris* Conrad holotype, No. 13227 ANSP, Moore, 1962, pp. 66, 67

Glycymeris idonea (Conrad)**Glycymerididae**

- Pectunculus idoneus* Conrad, 1833c, p. 39; (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Heilprin, 1884b, p. 87; de Gregorio, 1890, p. 195; Harris, 1895b, p. 22
- Trigonarca (Latiarca) idonea* (Conrad), Conrad, 1863a, p. 289
- Axinaea idonea* (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4
- Pectunculus Broderipii radiatus* de Gregorio, 1890, p. 194, pl. 24 (not pl. 34 as in text), figs. 15, 16
- Glycymeris idonea* (Conrad), Dall, 1898b, p. 607; Harris, 1919, p. 47, pl. 20, figs. 9-11; Harris and Palmer, 1946, p. 49, pl. 12, figs. 4-12; Brann and Kent, 1960, pp. 423, 424

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. Variations upper Eocene.

Localities.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type). Jackson variations—MISS.: *Clarke Co.*, Garland Cr.; *Yazoo Co.*, Sims Siding, N. of Yazoo City. LA.: *Grant Par.*, Montgomery, Red R.

Types.—Probable syntypes (4), No. 30512 ANSP, Moore, 1962, p. 65

Glycymeris idonea (Conrad) subsp.**Glycymerididae**

- Pectunculus idoneus* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 84, pl. 29, figs. 1a-1d, 2 sp. as *Pectunculus* (Aquia fm.)
- Glycymeris idoneus* (Conrad), Clark and Martin, 1901, p. 194, pl. 51, figs. 2, 2a, 3, 3a, 4 (Aquia fm.); Shimer and Shrock, 1944, p. 383
- idonea*, pl. 148, figs. 12, 13 copy Clark and Martin
- May be two subspecies

Range.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm.

Localities.—MD.: *Anne Arundel Co.*, 1 mi. W. of Hardesty; Hardesty; Sheckel's Farm near South R., 2 and 3 mi. S. of South R.; *Prince Georges Co.*, Upper Marlboro; *Charles Co.*, Popes Cr. VA.: *King George Co.*, Woodstock; *Stafford Co.*, Potomac Creek; [*Hanover ?*] *Co.*, Hanoverville

Types.—Figured specimens, Clark, 1896; Clark and Martin, 1901, USNM

Glycymeris idonea (Conrad) subsp.**Glycymerididae**

- Pectunculus* (n. sp.) Tuomey, 1858, p. 271
- Pectunculus stamineus* (Conrad), Aldrich, 1886, pp. 50, 57, 58
- Pectunculus idoneus* Conrad var., Harris, 1897b, p. 49, pl. 8, figs. 5, 5a, 6; Stewart, 1930, p. 72; Brann and Kent, 1960, p. 673

Range.—Lower Eocene. Middle and upper Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R. For additional localities see Aldrich, 1886 and Harris, 1897b

Types.—Figured specimens (Harris), Nos. 146, 147 PRI

Glycymeris idoneus (Conrad), Clark and Martin, 1901

See *Glycymeris idonea* (Conrad) subsp.

Glycymeris intercostata (Gabb)

Pl. 1, figs. 1, 2

Glycymerididae

- Axinaea intercostata* Gabb, 1860b, p. 402, pl. 68, fig. 2; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4
- Glycymeris intercostata* (Gabb), Dall, 1898b, p. 607 (Oligocene) and *bellascepta* Conrad = *G. arcata* (Conrad)

Range.—See locality

Localities.—"Alabama" (Gabb); "Texas" (Conrad); "Vicksburgian Oligocene" (Dall)

Type.—Holotype, ANSP

Glycymeris lisbonensis Harris

Glycymerididae

Glycymeris lisbonensis Harris, 1919, p. 48, pl. 20, figs. 12-15; cf. Richards in Richards and Palmer, 1953, p. 45, pl. 9, figs. 3, 4; Stenzel Krause, and Twining, 1957, p. 60; Brann and Kent, 1960, p. 425

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. Cf. Upper Eocene (Richards)

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type). MISS.: Clarke Co., Wautubbee, Cf. FLA.: Levy Co., 2.9 mi. S. of Gulf Hammock (Richards)

Types.—Syntypes, No. 533-536 PRI

Glycymeris minor (Lea)

See *Glycymeris trigonella minor* (Lea)

Glycymeris petropolitana Stenzel and Twining

Glycymerididae

Glycymeris petropolitana Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 19-22

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20729 BEG (figs. 19, 22), paratype, No. 20730 BEG (figs. 20, 21), unfigured paratypes, Nos. 20731, 20732 BEG.

Glycymeris sabinensis Harris

Glycymerididae

Glycymeris sabinensis Harris, 1919, p. 51, pl. 21, figs. 8-10; Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 17, 18; Brann and Kent, 1960, p. 426

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: Sabine Co., Sabine R., Veatch loc. 22 opposite SE. $\frac{1}{4}$ sec. 35, T. 5 N., R. 13 W., Sabine Par., La. (type)

Types.—Syntypes, Nos. 545-547 PRI

Glycymeris staminea (Conrad)

Glycymerididae

Pectunculus stamineus Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 339 as *stramineus* [sic]; Tuomey, 1858, pp. 267, 274; Heilprin, 1884b, p. 87; Harris, 1895b, p. 42

Pectunculus Broderipii Lea, 1833, p. 76, pl. 3, fig. 53; Conrad, App. in Morton, 1834, p. 6 = *P. stamineus* Conrad; H. C. Lea, 1849, p. 104; Tuomey, 1858, p. 267; de Gregorio, 1890, p. 193, pl. 24 (not pl. 34 as in text), figs. 4, 5, 7-10, fig. 11 copy Lea, figs. 12-14 not 15, 16 var. *radiatus* de Gregorio see *G. idoneus*; Cossmann, 1893, p. 16; Harris, 1895b, p. 8

Axinaea staminea [sic] (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4

Glycymeris staminea (Conrad), Dall, 1898b, p. 607; Harris, 1919, p. 46, pl. 20, figs. 4-8; Stenzel, Krause, and Twining, 1957, p. 61, text fig. 9; Brann and Kent, 1960, pp. 426, 427

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Possible syntypes, Nos. 30571, 30572 ANSP, Moore, 1962, p. 98

Glycymeris trigonella (Conrad)

Glycymerididae

Pectunculus trigonella Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6 as *trigonellus*; H. C. Lea, 1849, p. 104; Harris, 1895b, p. 46 *trigonellus*

Pectunculus deltoideus Lea, 1833, p. 77, pl. 3, fig. 55; Conrad, App. in Morton, 1834, p. 6 as *deltoidea*—*P. trigonellus* Conrad; H. C. Lea, 1849, p. 104; Tuomey, 1858, pp. 267, 274; de Gregorio, 1890, p. 194, pl. 23, figs. not 15, 16, as in Harris, 32—42, fig. 31 copy Lea; pl. 24, figs. 1-3 includes muts. *ignus*, *percuneatus*, and *striatus*; Cossmann, 1893, p. 17 included *minor*; Harris, 1895b, p. 15

Limopsis trigonella (Conrad), d'Orbigny, 1850, p. 389

Azinea trigonella (Conrad), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4

Glycymeris trigonella (Conrad), Dall, 1898b, p. 606; Harris, 1919, p. 49, pl. 21 [not pl. 20 as in text], figs. 1, 2, 4; Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 11-13; Brann and Kent, 1960, p. 427

Glycymeris deltoideus (Lea) vars. *ignus*, *percuneata*, *striatus* (de Gregorio), Harris, 1919, p. 201

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, Nos. 30568, 30569, 30570 ANSP, Moore, 1962, p. 104. Syntypes, *P. deltoideus percuneatus* (figs. 38-41), No. 26454 De Gregorio Coll., PRI. Holotype, *P. deltoideus ignus* (fig. 36), No. 26453 De Gregorio Coll., PRI

Glycymeris trigonella minor (Lea)

Glycymerididae

Pectunculus minor Lea, 1833, p. 77, pl. 3, fig. 54; not Conrad, App. in Morton, 1834, p. 7 = *P. declivis*; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 under *P. declivis* Conrad; de Gregorio, 1890, p. 195, pl. 23, fig. 30 copy Lea; Cossmann, 1893, p. 17 as *deltoideus* see under *P. trigonella*; Harris, 1895b, p. 28

Not *Pectunculus minor* Lea, Conrad, 1865a, p. 12 see under *Limopsis declivis* (Conrad)

Glycymeris minor Lea, Dall, 1898b, p. 606

Glycymeris trigonella minor (Lea), Harris, 1919, p. 49, pl. 21 (not pl. 20 as in text), figs. 3, 6, 7 (not 6 on expl. of pl.); Brann and Kent, 1960, pp. 427, 428

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr., Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). LA.: Bienville Par., Hammetts Branch; Lincoln Par., Ruston well (Harris)

Type.—Possible holotype, No. 5328 ANSP, Lea Coll.

Glycymeris trigonella wautubbeana Harris

See *Glycymeris wautubbeana* Harris

Glycymeris wautubbeana Harris**Glycymerididae**

Glycymeris trigonella var. *wautubbeana* Harris, 1919, p. 50, pl. 21, figs. 5, 5a; Brann and Kent, 1960, p. 428

Glycymeris wautubbeana Harris, Stenzel, Krause, and Twining, 1957, p. 60, pl. 5, figs. 14-16

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: *Clarke Co.*, Wautubbee (type)

Types.—Syntypes, Nos. 541, 542 PRI

Glycymeris sp.**Glycymerididae**

Axinea [sic] *subaustralis* d'Orbigny, Weller, 1907, p. 414, pl. 35, figs. 7, 8. Not d'Orbigny, 1850, p. 243

Range.—Lower Eocene. Vincentown fm.

Locality.—N. J.: *Monmouth Co.*, near Deal

Type.—Figured specimen unknown

Glycymeris sp.**Glycymerididae**

Glycymeris cf. *anteparilis* Kellum, Harris, 1951, p. 16, pl. 7, figs. 4-7 cf. to species from Miocene, Silverdale, Onslow Co., N. C. (Kellum, 1926, p. 35); Brann and Kent, 1960, p. 421

Range.—Upper Eocene. "Ocala ls." Ocala gr.

Locality.—GA.: *Houston Co.*, Clinchfield Quarry, W. side Pennsylvania Cement Corporation

Types.—Figured specimens, Nos. 24472, 24473, 24474 PRI

Glycymeris sp.**Glycymerididae**

Glycymeris arctatus cookei Dall, Harris, 1951, p. 17, pl. 7, fig. 12; Brann and Kent, 1960, p. 421

This shell belongs to the group of *G. arctata* (Conrad), 1848 Oligocene and *G. cookei* Dall, 1916 Miocene

Range.—Upper Eocene. "Ocala ls." Ocala gr.

Locality.—GA.: *Dougherty Co.*, E. side of Flint R. just below dam at junc. with Kinchefoonee Cr., near Albany

Type.—Figured specimen No. 24479 PRI

Glycymeris sp.**Glycymerididae**

Glycymeris sp. Gardner, 1945, p. 133

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Maverick Co.*, 3 mi. W. of Farias ranch house on south ranch road

Type.—Unfigured specimen probably USNM

Glycymeris sp.**Glycymerididae**

Glycymeris sp., Gardner, 1945, p. 133

Range.—Paleocene. Wills Point fm., upper Midway gr.

Locality.—TEXAS: *Maverick Co.*, USGS Sta. 11754, 27 mi. SE. Eagle Pass

Type.—Unfigured specimen probably USNM

Glycymeris sp.**Glycymerididae**

Pectunculus sp., Harris, 1896, p. 53, pl. 4, fig. 3; Brann and Kent, 1960, p. 673 [not Ala. as on p. 673 see localities]

Range.—Paleocene. Midway gr.

Localities.—ALA.: Wilcox Co., 1½ mi. SW. of Palmer's Mill; between Snow Hill and Allentown at "Hamburg"; ½ mi. W. of Graveyard Hill. GA.: Clay Co., uppermost layer Ft. Gaines. TENN.: Hardeman Co., 5 mi. S. Crainesville (specimen figured, Harris, 1896)

Type.—Figured specimen lost prior to 1937 PRI

Goodallia ? *americana* Dall

See *Astarte* (*Goodallia* ?) *americana* Dall

Goodallia nana (Lea)

See *Microstagon nana* (Lea)

Gouldia perdita Conrad, 1865a, p. 10 *nomen nudum* [error]

See *Crassinella pygmaea* (Conrad)

Gouldia pygmaea Conrad

See *Crassinella pygmaea* (Conrad)

Grateloupia moulinsi var. *symetrica* de Gregorio

See *Gratelupia* (*Cytheriopsis*) *hydana* (Conrad)

***Gratelupia* [*Grateloupia**] (*Cytheriopsis*) *hydana* (Conrad) Veneridae**

Cytherca Hydana Conrad, 1833b, p. 36, not pl. 19, fig. 2 as in text (Harris reprint, 1893, p. 58, pl. 20, fig. 3); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99 *Hydiana*; d'Orbigny, 1850, p. 381; Harris, 1895b, p. 22

Gratelupia Moulinsii Lea, 1833, p. 59, pl. 2, fig. 33; Conrad, App. in Morton, 1834, p. 8 = *Cytherea hydana* Conrad; H. C. Lea, 1849, p. 100; d'Orbigny, 1850, p. 381; de Gregorio, 1890, p. 221, pl. 34, fig. 33 copy Lea; figs. 28-32 var. *symetrica* = young of *G. hydana*, Harris, 1919, p. 201; Harris, 1895b, p. 29 (= *C. hydana* Conrad)

Cytheriopsis hydana (Conrad), Conrad, 1865a, p. 7; Conrad, 1865c, p. 146; Tryon, 1884b, p. 179, pl. 115, fig. 29

Meretrix Dalli Cossmann, 1893, p. 11, pl. 1, figs. 9, 10 not *Meretrix dalli* Dickerson, 1914 = "*Pitaria* ?" *praeinominata* G. D. Hanna, 1924

Grateloupia (*Cytheriopsis*) *hydana* (Conrad), Dall, 1902, p. 348; Dall, 1903a, p. 1239; Palmer, 1927/1929, p. 106, pl. 21, figs. 17, 18, 23, 26, 27; Brann and Kent, 1960, p. 430

Gratelupia (*Cytheriopsis*) *hydana* (Conrad), Harris, 1919, p. 152, pl. 47, figs. 12, 13, 13a; Brann and Kent, 1960, p. 430

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Holotype, ANSP, see Palmer, 1927, p. 107; missing 1962, Moore, 1962, p. 65; *Meretrix dalli* Cossmann, holotype, No. 11639, Lab. Géol., Sorbonne, Paris

**Gratelupia* as written by Desmoulins, 1828, Bull. Hist. Nat. Soc. Linn. Bordeaux, 2 (12), p. 236. Following D'Orbigny, 1852, p. 74 "*Grateloupia*"; Hoernes, 1870, p. 149, name corrected to *Grateloupia* to conform to spelling of Grateloup for whom it certainly was named. The question is whether to consider the spelling a *lapsus* and correct the generic spelling or to follow the original spelling as authors have done.

Gratelupia Moulinsii Lea

See *Gratelupia (Cytheriopsis) hydana* (Conrad)

Gryphaea bryanii (Gabb)

See *Ostrea bryani* Gabb

Gryphaea Bryani var. *precedens* Whitfield

See *Ostrea bryani* Gabb

Gryphaea convexa (Say)

See *Ostrea convexa* Say

Gryphaea pitcheri Morton, White, 1882

See *Ostrea (Ostrea) pulaskensis* (Harris)

Gryphaea plicatella Morton

See *Gryphaeostrea vomer plicatella* (Morton)

Gryphaea thirsae Gabb

See *Odontogryphaea thirsae* (Gabb)

Gryphaea vesicularis Lamarck, Whitfield, 1885

See *Ostrea* sp.

Gryphaca vomer Morton

See *Gryphaeostrea vomer* (Morton)

Gryphaea vomer Morton, Safford, 1869

See *Ostrea (Ostrea) pulaskensis* Harris

Gryphaeostrea vomer (Morton)

Ostreidae

Gryphaea vomer Morton, 1828b, p. 83; Morton, 1828c, p. 198; Morton, 1830a, p. 283; Morton, 1830b, p. 250, pl. 3, figs. 1, 2; Morton, 1834, p. 54, pl. 9, fig. 5; Conrad, 1835b, p. 336; Conrad, 1842b, p. 172; H. C. Lea, 1849, p. 100

Ostrea vomer (Morton), de Gregorio, 1890, p. 178, pl. 19, fig. 7 copy Morton

Ostrea (Gryphaeostrea) subversa Conrad, Dall, 1898b, p. 672 in part

Ostrea (Gryphaeostrea) vomer (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, figs. 4, 4a; Shimer and Shrock, 1944, p. 397 in part, pl. 155, figs. 1, 2 copy Clark and Martin

Gryphaeostrea vomer (Morton), Weller, 1907, p. 455, pl. 44, figs. 10, 11; Gardner, 1935, p. 135; Harris and Palmer, 1946, p. 14, pl. 1, figs. 1, 2 copies Clark, 1916, Cretaceous, figs. 3, 4 copies Morton, 1830b, fig. 6; Richards, 1950, p. 15, fig. 62g; Richards in Richards, *et al.*, 1958 p. 113, pl. 21, fig. 3

Complete Cretaceous synonymy is not given.

Range.—Upper Cretaceous. Paleocene. Aquia fm.; Hornerstown fm. (type); Kincaid fm. (reworked), Midway gr. Lower Eocene. Vincentown fm.; Manasquan fm.

Localities.—N. J.: *Ocean Co.*, New Egypt (type); *Monmouth Co.*, Hornerstown; *Burlington Co.*, Vincentown; *Camden Co.*, Clementon; *Gloucester Co.*, Sewell. MD.: *Prince Georges Co.*, Upper Marlboro. N. C.: *Halifax Co.*, rd. cut on highway 258, about 2 mi. E. of Thelma. TEXAS: *Travis Co.*, ford on Wilbarger Cr., S. of Littig; ½ mi. E. of Travis-Bastrop Co. line on Austin-Bastrop rd.; *Caldwell Co.*, 5 mi. NW. of Lytton Springs; *Guadalupe Co.*, on E. facing slope of the San Marcos R. valley, ½ mi. N. of Staples

Type.—Holotype, No. 16167 ANSP

Gryphaeostrea vomer plicatella (Morton)**Ostreidae**

Gryphaea plicatella Morton, 1833a, p. 293; Morton, 1833b, pl. 9, fig. 4; Morton, 1834, p. 55, pl. 9, fig. 4

Gryphostrea [sic] *eversa* (Deshayes), Conrad, 1866a, p. 3 in part, Miss. *Ostrea* (*Gryphaeostrea*) *subversa* Conrad, Dall, 1898b, p. 681 in part *Gryphaeostrea vomer* var. *plicatella* (Morton), Harris and Palmer, 1946, p. 16, pl. 1, figs. 5, 7-13; Brann and Kent, 1960, p. 431

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—ALA.: "overlying limestone in Alabama" (type).

MISS.: Clarke Co., 2-3 mi. E. of Shubuta; Choctaw Co., S. of Silas-Waynesboro road, 5 mi. west of Silas

Type.—Missing ANSP

Gryphostrea [sic] *eversa* "(Deshayes)" [Melleville] Conrad, 1866a

See *Ostrea subversa* Conrad

See *Gryphaeostrea vomer plicatella* (Morton)

Halonanus (*Trinacriella*) *cossmanni* (Dall)

See *Nanohalus cossmanni* (Dall)

Halonanus decicus (Conrad)

See *Pachecoa* (*Pachecoa*) *decisa* (Conrad)

Halonanus declivis (Conrad)

See *Pachecoa* (*Pachecoa*) *declivis* (Conrad)

Halonanus (*Trinacriella*) *ellipsis* (Lea)

See *Pachecoa* (*Stenzelia*) *ellipsis* (Lea)

Halonanus (*Trinacriella*) *perplanus* (Conrad)

See *Pachecoa* (*Stenzelia*) *perplana* (Conrad)

Halonanus pulcher (Gabb)

See *Pachecoa* (*Pachecoa*) *sabinica* (Harris)

See also *Pachecoa* (*Pachecoa*) *pulchra* (Gabb)

Halonanus pulchrus (Gabb)

See *Pachecoa* (*Pachecoa*) *pulchra* (Gabb)

"Here" (or *Lucina*) *dolabra* Conrad, Chavan

See *Lucina* (*Recurvella*) *dolabra* Conrad

Here cf. *wacissana* (Dall)

See *Lucina* sp.

Here sp.

See *Lucina* sp.

Hindsiella donacia Dall

See *Hindsiella faba donacia* Dall

Hindsiella faba Meyer**Sportellidae**

Hindsiella faba Meyer, 1886b, p. 82, pl. 1, fig. 25; Dall, 1899, p. 882; Dall, 1900, p. 1136; Harris, 1919, p. 106, pl. 37, fig. 5 copy Meyer

Kellia faba (Meyer), de Gregorio, 1890, p. 211, pl. 30, fig. 16 copy Meyer; Cossmann, 1893, p. 12

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638848 USNM

Hindsia faba donacia Dall**Sportellidae**

Hindsia donacia Dall, 1899, p. 882 listed only

Hindsia (faba var. ?) donacia Dall, 1900, p. 1136, pl. 45, fig. 12; Schuchert, et al., 1905, p. 315; Harris, 1919, p. 106, pl. 37, fig. 6 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 155757 USNM

Hippagus isocardioides Lea

See *Crenella isocardioides* (Lea)

Hormomya hamatoides (Call)**Mytilidae**

Mytilus hamatoides Call, 1891, p. 202, text fig.

Mytilus (Hormomya) hamatoides Call, Harris and Palmer, 1946, p. 40, pl. 10, figs. 7-9; Wilbert, 1953, p. 98 (as *Harmomya sic*), p. 122; Brann and Kent, 1960, p. 578

Range.—Upper Eocene. ? Upper Jackson gr. (type)

Locality.—ARK.: St. Francis Co., Little Crow Cr., 2 mi. E. of Forrest City (type)

Type.—Unknown

Idonearca medians Whitfield

See *Cucullaea vulgaris* Morton

Isocardia conradi Gabb

See *Glossus ? conradi* (Gabb)

Isocardia mediavia Harris

See *Glossus mediavia* (Harris)

Isognomon cornelliana (Harris)**Isognomonidae**

Perna cornelliana Harris, 1896, p. 48, pl. 3, figs. 2, 3; Dall, 1898b, p. 668; Brann and Kent, 1960, p. 676

Cf. *Melina* sp. Dall, 1898b, p. 667 "one fossil *Melina* is reported from the Gulf tertiaries in the lowest Eocene".

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Locality.—ALA.: Barbour Co., RR. cut 1 1/2 mi. NE. of Clayton (type)

Types.—Syntypes, Nos. 52, 53 PRI

Jupiteria (Ledina) jonesi Gardner**Nuculanidae**

Yoldia eborea (Conrad), Harris, 1896, p. 56 in part. Not *Leda eborea* Conrad, 1860

Not *Leda (Ledina) smirna* Dall, 1898b, pp. 578, 580 as in Gardner, 1929, p. 427

Leda (Ledina) jonesi Gardner, 1929, pp. 427, 428, fig. 1 (2 views)

Range.—Paleocene. Sucarnoochee cl. (type), Porters Creek fm., upper Midway gr.

Locality.—ALA., Sumter Co., Black Bluff, Tombigbee R. (type), sec. 12, [11] T. 16 N., R. 1 W.

Type.—Holotype, No. 371067 USNM

Jupiteria (Ledina) smirna Dall**Nuculanidae**

Leda eborea Conrad, 1860, p. 295, pl. 47, fig. 26; not *Nucula eborea* Conrad, 1846a, p. 24 = *N. concentrica* Say, 1824b, p. 141

Yoldia eborea (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Harris, 1896, p. 56, pl. 4, fig. 7; Shimer and Shrock, 1944, p. 379, pl. 146, fig. 36 copy Harris, 1896; Brann and Kent, 1960, p. 983

Leda (Yoldia) eborea Conrad, de Gregorio, 1890, p. 187, pl. 22, fig. 37 type; ? Harris, 1894b, p. 42

Leda (Ledina) smirna Dall, 1898b, pp. 578, 580; Gardner, 1935, p. 121, pl. 6, fig. 11

Jupiteria smirna (Dall), Stewart, 1930, pp. 53, 54

Ledina smirna Dall, Gardner, 1945, p. 44, pl. 4, fig. 4

Range.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.; Matthews Ldg. mem. (type), Porters Creek fm., upper Midway gr.

Localities.—ALA.: Showalter Coll. = *Wilcox Co.*, Matthews Ldg. fide Gardner, 1935, p. 122 (type). TEXAS: See Gardner, 1935, p. 123

Type.—Lost [Showalter Coll.], Gardner, 1935, p. 122

Katherinella smithvillensis Stenzel and Krause**Veneridae**

Katherinella smithvillensis Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 135, pl. 16, figs. 4-6, 15, 16 and text fig. 21

Range.—Middle Eocene. Viesca mem. (type) Weches fm., middle Claiborne gr.; Stone City beds, middle Claiborne gr.; ? Wheelock mem. and (?) Landrum mem., Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville (type); *Brazos Co.*, ? mouth of Little Brazos R.; *Burleson Co.*, Stone City Bluff, Brazos R.; ? *Houston Co.*, Hurricane Bayou

Types.—Holotype, No. 20540 BEG (figs. 4, 5); paratypes, No. 20543 BEG (fig. 6), No. 20544 BEG (figs. 15, 16)

Katherinella ? texitrima Stenzel and Krause**Veneridae**

Katherinella ? texitrima Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 138, pl. 16, figs. 11-14; pl. 22, figs. 15, 16

Range.—Middle Eocene. Stone City beds (55 feet from top), middle Claiborne gr.

Locality.—TEXAS: *Houston Co.*, bluff on left bank Trinity R., 0.85 mi. air-line distance N. of Alabama Ferry

Types.—Holotype, No. 20567 BEG (pl. 22, figs. 15, 16); paratypes No. 20566 BEG (pl. 16, figs. 11, 12); No. 20568 BEG (pl. 16, figs. 13, 14)

Katherinella trigoniata (Lea)**Pl. 2, figs. 4, 5 Veneridae**

Cytherea trigoniata Lea, 1833, p. 67, pl. 2, fig. 44; H. C. Lea, 1849, p. 99; de Gregorio, 1890, p. 218, pl. 34, figs. 15-20; not figs. 14a, b = *C. hatchetigbeensis* Aldrich; fig. 21 copy *trigoniata* Lea; fig. 22 copy *minima* Lea; Harris, 1895b, p. 46

Cytherea minima Lea, 1833, p. 68, pl. 2, fig. 45; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 28; Palmer, 1927/1929, p. 214

Venus trigonata [sic] (Lea), d'Orbigny, 1850, p. 380 in part

Dione discoidalis Conrad, 1865a, p. 6; Conrad, 1866a, p. 7. Not *C. discoidalis* Conrad, 1833b, p. 37 (Harris reprint, 1893, pl. 20, fig. 2)

- Meretrix minima* (Lea), Cossmann, 1893, p. 10
Meretrix aequorea trigoniata (Lea), Cossmann, 1893, p. 10
Meretrix trigoniata (Lea), Harris, 1919, p. 146, pl. 47, figs. 1-3; Brann and Kent, 1960, p. 547
Pitaria (Lamelliconcha) trigoniata (Lea), Palmer, 1927/1929, p. 41, pl. 8, figs. 27, 32; Brann and Kent, 1960, p. 707
Pelecypora trigoniata (Lea), Stewart, 1930, p. 237
Pitar trigoniata (Lea), Harris and Palmer, 1946, p. 95, pl. 21, figs. 4, 5; Harris, 1951, p. 22, pl. 11, fig. 9; Wilbert, 1953, p. 123, pl. 2, figs. 3a, 3b, Arkansas; Brann and Kent, 1960, pp. 694, 695
Katherinella trigoniata (Lea), Stenzel, Krause, and Twining, 1957, p. 138

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr., McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr. Upper Eocene. Moodys Branch fm., and White Bluff fm., lower Jackson gr.

Localities.—ALA.: Monroe Co., sand (type) and* base of Claiborne Bluff, Alabama R.; Hamilton Bluff, Alabama R. GA.: Clay Co., Fort Gaines; Houston Co., 2.9 mi. S. of Perry. S. C.: Orangeburg Co., 5 mi. N. of Orangeburg. ARK.: St. Francis Co., Crow Creek near Forrest City; Jefferson Co., White Bluff, Arkansas R.; Cleveland Co. LA.: Grant Par., Montgomery, Red R.

Types.—Syntypes?, Nos. 5248, 5249 ANSP

***Katherinella* ? *trigoniata bastropensis* (Harris)**

Veneridae

- ? *Cytherea nuttali* Conrad, 1857, p. 162, pl. 4, fig. 5
 Not *Caryatis exigua* Conrad, 1871a, p. 201, pl. 11, fig. 3 as in Harris, 1919
 ? *Cytherea nuttallii* Conrad, Heilprin, 1891a, p. 402 as in Harris, 1919
 ? *Mysia unguina* Heilprin, 1891a, p. 402 *vide* Harris, 1919, p. 148.
 Not *Cytherea (Dione) discoidalis* Conrad, Heilprin, 1891a, p. 402 as in Harris, 1919
Meretrix trigoniata var. *bastropensis* Harris, 1919, p. 148, pl. 47, fig. 4, not fig. 5 see *Katherinella* sp., not fig. 6—*Callocardia amichel* Gardner, 1945; Renick and Stenzel, 1931, p. 104 loc. 5 only. For loc. 1 see *Sinodia eocaenica* Stenzel and Krause in Stenzel, Krause, and Twining, 1957. Stenzel, Krause, and Twining, 1957, p. 136 explained mixture of original data; not Brann and Kent, 1960, p. 547 see *Katherinella* ? sp.
Callocardia bastropensis (Harris), Gardner, 1945, p. 117 lectotype designation
Pitaria (Lamelliconcha) trigoniata bastropensis (Harris), Palmer, 1927/1929, p. 42 in part, pl. 8, fig. 17 copy Harris, not synonymy of *P. nuttali*, p. 14

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Localities.—TEXAS: Bastrop Co., "Bastrop River" (type) [Texas Geol. Sur.], station 11 Devil's Eye, Colorado R., localities mixed in Harris, see Gardner, 1945 and Stenzel, Krause, and Twining, 1957. See Harris, 1919, for localities listed

Type.—Lectotype, No. 407 old Texas State Mus., pl. 47, fig. 4, Harris, 1919 selected by Gardner, 1945, p. 117. Lost *vide* Stenzel, Krause, and Twining, 1957; Rodda, 1964

Katherinella trinitatis Stenzel and Krause**Veneridae**

Katherinella trinitatis Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 137, pl. 16, figs. 7-10, and text fig. 22

Range.—Middle Eocene. Stone City beds, (upper 55 feet) (type), middle Claiborne gr.

Locality.—TEXAS: *Houston Co.*, bluff on left bank of Trinity R. at sharp but obtuse bend 0.85 mile air-line distance N. of Alabama Ferry (type)

Types.—Holotypes, No. 20555 BEG (figs. 7, 8), paratype, No. 20556 BEG (figs. 9, 10)

Katherinella ? sp.**Veneridae**

Meretrix trigoniata bastropensis Harris, 1919, p. 148 in part, pl. 47, fig. 5; Brann and Kent, 1960, p. 547

Pitaria (Lamelliconcha) trigoniata bastropensis (Harris), Palmer, 1927/1929, p. 42, pl. 8, fig. 13 copy Harris

Range.—Middle Eocene. Claiborne gr. (for discussion see Stenzel, Krause, and Twining, 1957, p. 136)

Locality.—LA.: Sabine R. (see Veatch Survey, 1902, p. 129)

Type.—Figured specimen, No. 1192 PRI

Kellia faba (Meyer)

See *Hindsella faba* Meyer

Kellia interstriata Aldrich **Kelliidae (Lasiadae, Leptonidae, Erycinidae)**

Kellia interstriata Aldrich, 1908b, p. 74, pl. 5, figs. 1, 2

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: *Clarke Co.*, Enterprise (type)

Type.—Holotype, missing USNM, 1962

Kellia prima Aldrich

See *Bornia prima* (Aldrich)

Kelliella ? aldrichi Gardner**Kelliellidae**

Kelliella ? aldrichi Gardner, 1935, p. 178, pl. 16, figs. 7, 8

Range.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm. (type), upper Midway gr.

Localities.—TEXAS: *Williamson Co.*, Dry Brushy Creek, 6 mi. S. of Thrall, USGS Sta. 10420 (type); *Bastrop Co.*, directly above bridge over Cedar Creek bridge on Austin-Red Rock rd.; Colorado R., 4 mi. below Webberville; *Caldwell Co.*, Bur. Ec. Geol. Station 12, 4.6 mi. NW. of Lockhart; 1.9 mi. N. of Lockhart

Type.—Holotype, No. 370993 USNM

Kelliella boettgeri Meyer**Kelliellidae**

Kelliella ? boettgeri Meyer, 1886b, p. 83, pl. 3, figs. 15, 15a; not Aldrich, 1886, p. 49; de Gregorio, 1890, p. 211

Kelliella Boettgeri Meyer, Dall, 1900, p. 1167

Kellyella Boettgeri Meyer, Cossmann, 1893, p. 13

Kelliella boettgeri Meyer, Harris, 1920, p. 10, pl. 17, figs. 16-18, text fig 7; Harris and Palmer, 1946, p. 83, pl. 19, figs. 6, 6a; Brann and Kent, 1960, p. 989

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Types.—Syntypes, figs. 15, 15a, No. 638850; fig. 15a [top] No. 638851 USNM

Kelliella ? evansi Gardner

Kelliellidae

Kelliella ? evansi Gardner, 1935, p. 177, pl. 16, figs. 5, 6

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Uvalde Co.*, 1 foot above bed of Frio R. just above trail from Bob Evans' (Myrick's) apiary USGS Sta. No. 11767 (type)

Types.—Syntypes (2), No. 370915 USNM

Kellyella

See *Kelliella*

Kummelia americana (Gabb)

Gastrochaenidae

Gastrochaena Americana Gabb, 1860d, p. 393, pl. 68, fig. 20; Whitfield, 1885, p. 203 in part, pl. 26, figs. 17, 18; Meek, 1864, p. 15; Johnson, 1905, p. 18; Weller, 1907, p. 649, pl. 73, fig. 13

Polorthus americanus (Gabb), Gabb, 1862b, p. 367 in part; Meek, 1864, p. 16; Stoliczka, 1871, pp. xv, 15 *Polarthus* [sic]; Gabb, 1872, p. 259 in part, pl. 8, fig. 8

Kummelia americana (Gabb), Stephenson, 1937, p. 61, text figs. 1-8
type species *Kummelia*, Stephenson, 1937

Range.—Paleocene. Aquia fm. Lower Eocene. Vincentown fm. (type)

Localities.—N. J.: Timber Creek (type), border between Camden and Gloucester Cos.; Ocean Co., Crosswicks Cr. 0.7 mi. N. by W. of New Egypt; Burlington Co. (Gabb). MD.: Prince Georges Co., rd. cut just E. of West Branch of Patuxent R., ¾ mi. W. of Oak Grove, 2.6 mi. W. of Leeland

Types.—Syntypes, No. 13403 ANSP

Kymatox Stenzel and Krause, 1957

See *Pteropsella* Vokes, 1956

Kymatox lapidosus (Conrad)

See *Pteropsella lapidosa* (Conrad)

Kymatox papyrius (Conrad)

See *Pteropsella papyria* (Conrad)

Kymatox praelapidosus Stenzel and Krause

See *Pteropsella praelapidosus* (Stenzel and Krause)

Laevicardium gardnerae Cooke

Cardiidae

Cardium (*Laevicardium*) *gardnerae* Cooke, 1926b, p. 138, figs. 17a, b

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type)

Type.—Holotype, No. 353953 USNM

Laevicardium (Dinocardium) levyi Richards**Cardiidae**

Cardium (Dinocardium) levyi Richards in Richards and Palmer, 1953, p. 51, pl. 11, fig. 7

Range.—Upper Eocene. Inglis fm. (type), lower Ocala gr.

Locality.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock just SW. of State Road 55 SW. $\frac{1}{4}$ sec. 34, T. 14 S., R. 16 E. (type)

Type.—Holotype, No. I-7568 Fla. Geol. Sur.

Laevicardium (Dinocardium) palmerae (Harbison)**Cardiidae**

Cardium palmerae Harbison, 1944, p. 5, pl. 2, fig. 7

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *fide* Cooke and MacNeil, 1952, p. 20

Locality.—S.C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

Type.—Holotype, No. 16164 ANSP

Latiarca gigantea (Conrad)

See *Cucullaea (Latiarca) gigantea* Conrad

Latiarca idonea Conrad

See *Cucullaea (Latiarca) gigantea* Conrad

Latiarca onochela Rogers and Rogers

See *Cucullaea (Latiarca) gigantea* Conrad

Latiarca transversa (Rogers and Rogers)

See *Cucullaea transversa* Rogers and Rogers

Leda acala Dall

See *Calorhadia (Litorhadia) acala* (Dall)

Leda adrana ? lisbonensis Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

Leda aequalis (Conrad)

See *Calorhadia equalis* (Conrad)

Leda albaria (Conrad)

See *Nuculana albaria* (Conrad)

Leda albirupina Harris

See *Calorhadia (Litorhadia ?) albirupina* (Harris)

Leda (Adrana) aldrichiana Harris

See *Adrana aldrichiana* Harris

Leda aldrichiana (Harris) 1897b, 1899b, "var."

See *Calorhadia (Litorhadia) aldrichiana sabinetownensis* (Barry)

Leda atakta Gardner

See *Saccella atakta* (Gardner)

Leda bastropensis HarrisSee *Calorhadia* (*Litorhadia* ?) *bastropensis* (Harris)*Leda bella* (Conrad)See *Calorhadia bella* (Conrad)*Leda bella* Conrad var.See *Nuculana* "bella (Conrad) var."*Leda Brongnarti* (Lea)See *Nuculana coelata* (Conrad)*Leda calcarensis* (Conrad)See *Nuculana calcarensis* (Conrad)*Leda carolinensis* (Conrad)See *Nuculana carolinensis* (Conrad)*Leda catasarca* DallSee *Saccella catasarca* (Dall)*Leda claibornensis* (Conrad)See *Orthoyoldia claibornensis* (Conrad)*Leda cliftonensis* Clark and MartinSee *Nuculana cliftonensis* (Clark and Martin)*Leda coelata* (Conrad)See *Nuculana coelata* (Conrad)*Leda coelatella* Van WinkleSee *Nuculana coelatella* (Van Winkle)*Leda coelatoides* HarrisSee *Nuculana* (*Hilgardia*) *coelatoides* (Harris)*Leda compsa* GabbSee *Calorhadia* (*Calorhadia*) *compsa* (Gabb)*Leda corpulentoides* (Aldrich)See *Nuculana corpulentoides* (Aldrich)*Leda corpulentoides* (Aldrich) "var."See *Nuculana corpulentoides* (Aldrich) "var."*Leda crassiparva* HarrisSee *Nuculana crassiparva* (Harris)*Leda cultelliformis* (Rogers and Rogers)See *Nuculana cultelliformis* (Rogers and Rogers)*Leda eborea* Conrad, 1860See *Jupiteria* (*Ledina*) *smirna* Dall

Leda elongatoidea Aldrich

See *Calorhadia* (*Litorhadia*) *elongatoidea* (Aldrich)

See also *Calorhadia* (*Litorhadia*) *elongatoidea* Aldrich "var." Harris, 1897b in part

See also *Calorhadia* (*Litorhadia*) *aldrichiana* (Harris)

See also *Calorhadia* (*Litorhadia*) *acala* (Dall)

Leda elongatoidea Aldrich "var." Harris, 1896

See *Calorhadia* (*Litorhadia*) *elongatoidea* (Aldrich) "var."

Leda eoa Gardner

See *Nuculana eoa* (Gardner)

Leda houstonia Harris

See *Nuculana trivitate* (Gardner)

See also *Calorhadia houstonia* (Harris)

Leda improcera (Conrad)

See *Nuculana improcera* (Conrad)

See also *Nuculana parilis* (Conrad) "var."

Leda jewetti Gardner

See *Nuculana jewetti* (Gardner)

Leda kittensis Harris

See *Nuculana kittensis* (Harris)

Leda linifera (Conrad)

See *Nuculana linifera* (Conrad)

Leda lisbonensis Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

Leda magna (Lea)

See *Nuculana magna* (Lea)

Leda magna lisbonensis Aldrich

See *Nuculana magna lisbonensis* (Aldrich)

Leda magnopsis Harris

See *Nuculana magnopsis* (Harris)

Leda marieana Aldrich

See *Nuculana marieana* (Aldrich)

Leda mater Meyer

See *Calorhadia* (*Calorhadia* ?) *mater* (Meyer)

Leda media (Lea)

See *Calorhadia equalis* (Conrad)

Leda micronata [sic] Conrad

See *Calorhadia semen* (Lea)

Leda milamensis Harris, 1895a not 1896

See *Nuculana milamensis* (Harris)

Leda milamensis Harris, 1896, not 1895a

See *Nuculana hannahae* Palmer and Brann, new name

Leda mucronata Conrad, 1854, p. 29

See *Calorhadia semen* (Lea)

Leda multilineata Conrad

See *Nuculana (Hilgardia) multilineata* (Conrad)

Leda opulenta (Conrad)

See *Calorhadia (Calorhadia) opulenta* (Conrad)

Leda opulenta compsa Gabb

See *Calorhadia (Calorhadia) compsa* (Gabb)

Leda opulenta hammetti Harris

See *Calorhadia (Calorhadia) hammetti* (Harris)

Leda ozarkola Harris

See *Nuculana ozarkola* (Harris)

Leda parilis (Conrad)

See *Nuculana parilis* (Conrad)

Leda parva (Rogers and Rogers)

See *Sacella parva* (Rogers and Rogers)

See also *Sacella robusta* (Aldrich)

Leda pharcida Dall

See *Calorhadia (Calorhadia) pharcida* (Dall)

Leda pistonupis Harris

See *Calorhadia pistonupis* (Harris)

Leda plana (Lea)

See *Nuculana plana* (Lea)

Leda plicata (Lea)

See *Calorhadia bella* (Conrad)

Leda potomacensis Clark and Martin

See *Calorhadia (Calorhadia) potomacensis* (Clark and Martin)

Leda protexta (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 82. Not

Nuculana protexta Conrad, 1865c. Not Gabb, 1860a.

See *Calorhadia (Calorhadia) potomacensis* (Clark and Martin)

Leda protexta (Conrad), 1865c

See *Calorhadia (Calorhadia) pharcida* (Dall)

Leda protexta Gabb, 1860a, p. 303. Cretaceous

Leda protexta Gabb, 1860d, p. 397, not Gabb, 1860a, p. 303
See *Nuculana saffordana* (Harris)

Leda pulcherrima (Lea)
See *Nuculana plana* (Lea)

Leda quercollis Harris
See *Saccella quercollis* (Harris)

Leda regina-jacksonis Harris
See *Calorhadia* (*Calorhadia*) *reginajacksonis* (Harris)

Leda robusta Aldrich
See *Saccella robusta* (Aldrich)

Leda saffordana Harris
See *Nuculana saffordana* (Harris)

Leda semen (Lea)
See *Calorhadia semen* (Lea)

Leda semenoides Aldrich
See *Calorhadia semenoides* (Aldrich)

Leda (*Ledina*) *smirna* Dall
See *Jupiteria* (*Ledina*) *smirna* Dall

Leda subtrigona (Conrad)
See *Nuculana subtrigona* (Conrad)

"*Leda* (*Nuculana*) *subtrigona* Con. ? S. Carolina" label in ANSP
fide Harris, 1919
See *Calorhadia houstonia* (Harris)

Leda trivitate Gardner
See *Nuculana trivitate* (Gardner)

Leda trumani Harris
See *Nuculana trumani* (Harris)

Leda tysoni Clark and Martin
See *Nuculana tysoni* (Clark and Martin)

Leda vanuxemi Dall
See *Nuculana vanuxemi* (Dall)

Leda wantubbeana Harris
See *Nuculana wantubbeana* (Harris)

Leda, n. sp. Gardner, 1935
See *Nuculana* sp.

Leda (*Saccella*), n.sp. Gardner, 1935
See *Saccella* sp.

Leda sp. Aldrich, 1886

See *Saccella robusta* (Aldrich)

Ledina jonesi Gardner

See *Jupiteria* (*Ledina*) *jonesi* Gardner

Ledina smirna (Dall)

See *Jupiteria* (*Ledina*) *smirna* Dall

Ledina sp.

Nuculanidae

Nuculana sp. Harris and Palmer, 1946, p. 60, pl. 14, figs. 9-11 section

Ledina; Brann and Kent, 1960, pp. 609, 610; No. 4239=figs. 9, 10; No. 4240=fig. 11 [not as on pp. 609, 610]

Range.—Upper Eocene. Jackson gr. (Harris, 1902, in Harris, Veatch and Pacheco, pp. 25, 273)

Locality.—TEXAS: *Hardin Co.*, Sour Lake well, 1500 ft., SE. Texas

Type.—Figured specimens, Nos. 4239, 4240 PRI

Lembulus coelatus (Conrad)

See *Nuculana coelata* (Conrad)

Lepton alabamiensis Aldrich

See *Sportella alabamiensis* (Aldrich)

Lepton vauhani Aldrich

Leptonidae

Lepton vauhani Aldrich, 1908b, p. 76, pl. 5, fig. 12

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 639059 USNM

Leuroactis Stewart, 1930, described as section

See *Venericardia pilsbryi* Stewart

Lima (Ctenoides) bastropensis Stenzel and Twining

Limidae

Lima (Ctenoides) bastropensis Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 90, pl. 8, figs. 4, 5

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: eastern *Bastrop Co.*, bluff on left bank of Pinoak Cr. next to county road leading N. to Center Union School, 800 ft. N. of right-angle turn of Smithville-Winchester rd., 0.5 mi. S. of Center Union School and 0.6 mi. SW. of Center Union Church, 4.5 mi. by rd. NW. of Winchester (Bur. Ec. Geol. loc No. 11-T-70)

Type.—Holotype (left valve), No. 20642 BEG

Lima dumosa (Morton), d'Orbigny, 1850

See *Spondylus dumosus* (Morton)

Lima (Ctenoides) harrisiana Aldrich

Limidae

Lima harrisiana Aldrich, 1910b, p. 74, pl. 4, figs. 10, 11; not Harris 1919, p. 29, pl. 16, fig. 1, 2; Teppner, 1914, p. 25; Harris, 1951, p. 12; not Brann and Kent, 1960, p. 494

Lima (Ctenoides) harrisiana Aldrich, Stenzel, Krause, and Twining, 1957, p. 90

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

Types.—Syntype fig. 10, No. 639107 USNM; fig. 11 missing

Lima harrisiana Aldrich, Harris, 1919

See *Lima* sp.

Lima (Limatulella) ozarkana Harris

Limidae

Lima ozarkana Harris, 1897b, p. 43, pl. 6, fig. 12; Brann and Kent, 1960, p. 495

Lima (Mantellum) ozarkana Harris, Dall, 1898b, p. 769

Lima (Limatulella) ozarkana Harris, Stenzel, Krause, and Twining, 1957, p. 90

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Dale Co.*, Ozark, R.R. cut just beneath the Buhrstone (type)

Type.—Holotype, No. 222 PRI

Lima (Limatulella) petropolitana Stenzel and Twining

Limidae

Lima (Limatulella) petropolitana Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 88, pl. 8, figs. 1, 2

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Type.—Holotype (an incomplete double-valve individual), No. 20643 BEG

Lima (Limatulella) smithvillensis Stenzel and Twining

Limidae

Lima (Limatulella) smithvillensis Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 88, pl. 8, fig. 13

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. [Bur. Econ. Geol. loc. no. 11-T-2]

Type.—Holotype (left valve), No. 20638 BEG

Lima (Ctenoides) tricinta Harris

Limidae

Lima tricinta Harris, 1951, p. 11, pl. 5, fig. 6; Brann and Kent, 1960, p. 495

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Locality.—GA.: *Dougherty Co.*, Armena Lime Mine, 10 mi. W. of Albany (type)

Type.—Holotype, No. 24458 PRI

Lima vicksburgiana Dall

Limidae

Lima vicksburgiana Dall, 1898b, p. 765, pl. 35, fig. 20; Schuchert, et al., 1905, p. 355; Harris, 1951, p. 11, pl. 5, figs. 7, 8; Brann and Kent, 1960, p. 495

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Localities.—FLA.: Levy Co., Johnson's lime-sink (type); [?] Co., La Penotière's hammock near Orient (Dall); Marion Co., Ocala Lime Rock Corp., abandoned quarry east of Kendrick (Harris)

Type.—Holotype, No. 107795 USNM

Lima sp.

Limidae

Lima harrisiana Aldrich, Harris, 1919, p. 29, pl. 16, figs. 1, 2; Stenzel, Krause, and Twining, 1957, p. 91; Brann and Kent, 1960, p. 494. Not Aldrich, 1910b, p. 74

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: Winn Par., Atlanta Rd. 6 mi. W. of Winnfield, "SE. of the so-called Marble Quarry" [Harris, 1919, p. 29]

Types.—Figured specimens, Nos. 465, 466, PRI

Lima sp.

Limidae

Lima sp. Harris, 1951 [no page], pl. 6, fig. 1; Brann and Kent, 1960, p. 495

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: Marion Co., Dixie Lime Products Co., Reddick

Type.—Figured specimen, No. 24461 PRI

Limopsis aviculoides (Conrad)

Limopsidae

Pectunculus aviculoides Conrad, 1833c, p. 39 (Harris reprint, 1893 p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 6

Pectunculus obliqua Lea, 1833, p. 78, pl. 3, fig. 57; Conrad, App. in Morton, 1834, p. 7=*P. aviculoides* Conrad; H. C. Lea, 1849, p. 104 [as *obliqua*]; d'Orbigny, 1850, p. 389 under *P. aviculoides*; Harris, 1895b, p. 31

Limopsis aviculoides (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 12; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Heilprin, 1884b, p. 88; de Gregorio, 1890, p. 193, pl. 23, *auriculoides* [sic] fig. 29 copy Conrad; Dall, 1898b, p. 605; Harris, 1919, p. 36, in part, pl. 18, figs. 6, 7 (figs. 1, 3-5=*var. mauricensis*) fig. 2 var.; Harris and Palmer, 1946, p. 51, pl. 12, fig. 17 (same as Harris, 1919, pl. 18, fig. 7); Brann and Kent, 1960, p. 496

Pectunculus Broderipii Lea, de Gregorio, 1890, p. 193 in part, pl. 24 (not pl. 34 as in text), only fig. 6 copy Lea *P. obliqua*

Limopsis obliqua (Lea), Cossmann, 1893, p. 16

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Probable holotype, No. 30538 ANSP Moore, 1962, p. 41. *P. obliqua* holotype, No. 5377 ANSP fide Harris, 1946

Limopsis aviculoides mauricensis Harris

Limopsidae

Limopsis aviculoides (Conrad), Harris, 1919, p. 36 in part, pl. 18, figs. 1, 3-5; Brann and Kent, 1960, p. 495

Limopsis aviculoides var. *mauricensis* Harris in Harris and Palmer, 1946, p. 61, pl. 12, figs. 18, 19 (same as Harris, 1919, pl. 18, figs. 3, 4); Brann and Kent, 1960, p. 496

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.
Locality.—LA.: Winn Par., St. Maurice (type)
Types.—Holotype, No. 492; paratypes, Nos. 489, 491, 493 PRI

Limopsis aviculoides (Conrad) "var."

Limopsidae

Limopsis aviculoides (Conrad), Harris, 1919, p. 36 in part, pl. 18, fig. 2; Brann and Kent, 1960, p. 496

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Localities.—MISS.: Newton Co., Hickory; Clarke Co., Wautubbee, 8 mi. NE. of Enterprise. LA.: Winn Par.; Winnfield; Sabine Par., Sabine R., SE. corner T. 5 N., R. 13 W.

Type.—Figured specimen, No. 490 PRI

Limopsis corbuloides (Conrad)

See "*Pectunculus*" *corbuloides* Conrad

Limopsis cossmanni Dall

See *Nanohalus cossmanni* (Dall)

Limopsis cuneus (Conrad)

See *Trinacria cuneus* (Conrad)

Limopsis decisis (Conrad)

See *Pachecoia* (*Pachecoia*) *decisa* (Conrad)

See also *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

Limopsis declivis (Conrad)

See *Pachecoia* (*Pachecoia*) *declivis* (Conrad)

Limopsis declivis (Conrad), de Gregorio, 1890, in part

See *Pachecoia* (*Pachecoia*) *decisa* (Conrad) "var."

Limopsis ellipsis (Lea)

See *Pachecoia* (*Stenzelia*) *ellipsis* (Lea)

Limopsis (*Trigonocallia*) *ledoides* (Meyer)

See *Pachecoia* (*Pachecoia* ?) *ledoides* (Meyer)

Limopsis obliqua (Lea)

See *Limopsis aviculoides* (Conrad)

Limopsis pectuncularis (Lea)

See *Pachecoia* (*Pachecoia* ?) *pectuncularis* (Lea)

Limopsis perplana Cossmann, 1893, not Conrad

See *Nanohalus cossmanni* (Dall)

Limopsis perplanus (Conrad)

See *Pachecoia* (*Stenzelia*) *perplana* (Conrad)

Limopsis pulcher (Gabb), Heilprin, 1891a, p. 403

See *Pachecoia* (*Pachecoia*) *pulchra* (Gabb)

See also under *Pachecoia* (*Pachecoia*) *microcancellata* (Barry)

Limopsis quihi Gardner

Limopsidae

Limopsis quihi Gardner, 1935, p. 124, pl. 6, figs. 5-8

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Medina Co.*, USGS Sta. 11876, 1 mi. E. of Quihi (type); USGS Sta. 11770 Hondo R. bed, 1 mi. NE. of New Fountain; *Uvalde Co.*, USGS Stas. 6279 and 11765, 11 mi. S. of Sabinal and a few hundred yds. S. of junction of Elm Cr. with Sabinal Cr. on Schuddemagen ranch

Type.—Holotype, No. 370905 USNM

Limopsis radiata Meyer

Limopsidae

Limopsis radiatus Meyer, 1885a, p. 459; Meyer, 1886b, p. 80, pl. 3, figs. 17, 17a; Cossmann, 1893, p. 16; Dall, 1898b, p. 605; Harris and Palmer, 1946, p. 51, pl. 12, figs. 13-16; pl. 13, figs. 1, 2; Brann and Kent, 1960, p. 497

Not *Pectunculus Broderipii radiatus* de Gregorio, 1890, p. 194, pl. 24 (not 34 as in text), figs. 15, 16

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); Town Cr., Jackson. LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R.: Bunker Hill Ldg., Ouachita R.

Type.—Holotype, No. 638696 USNM. Specimen labeled type; "type lot" on label.

Limopsis trigonella (Conrad)

See *Glycymeris trigonella* (Conrad)

Limopsis sp.

Limopsidae

Limopsis sp. Gardner, 1935, p. 125

Range.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

Localities.—TEXAS: *Bastrop Co.*, glauconitic red sand below rock ledge, directly above bridge over Cedar Creek on Austin-Red Rock road USGS Sta. 12109; right bank Colorado R., 4 mi. below Webberville, USGS Sta. 5280

Type.—Unfigured specimen not found USNM, 1962

Linearia ? *divaricata* Johnson

See *Sportella* ? *divaricata* (Johnson)

Linga ? (*Cavilinga*) *amica* (de Gregorio)

Lucinidae

Lucina amica de Gregorio, 1890, p. 204, pl. 28, figs. 1, 2; Dall, 1903a, p. 1364 in part; Harris, 1919, p. 111, pl. 37, figs. 22, 23 copy de Gregorio, questions the specimen from Claiborne

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. (locality questionable, Harris)

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type) (locality questionable)

Type.—Holotype, lost, formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily

Linga carinifera (Conrad)

Lucinidae

Lucina carinifera Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 15; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Tuomey, 1858, p. 266; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 204, pl. 29, fig. 9 copy *L. cornuta* Lea; fig. 10 copy Conrad; Cossmann, 1893,

- p. 11 *Linga*; Harris, 1895b, p. 10; Harris, 1919, p. 114, pl. 37, fig. 25 copy Conrad; fig. 26 copy *L. cornuta* Lea; figs. 27-29; Stewart, 1930, p. 178 type species new section *Quasilucina*; Brann and Kent, 1960, pp. 504, 505
- Lucina cornuta* Lea, 1833, p. 56, pl. 1, fig. 29; Conrad, App. in Morton, 1834, p. 7 (= *L. carinifera*); H. C. Lea, 1849, p. 101; Harris, 1895b, p. 13 (= *L. carinifera* Conrad)
- Cyclas carinifera* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8
- Phacoides* (Here) *carinifera* (Conrad), Dall, 1903a, p. 1364 includes *Lucina cornuta* Lea
- Linga carinifera* (Conrad), Chavan, 1937, pp. 148-151, *Quasilucina* Stewart, 1930=*Linga* de Gregorio, 1885, p. 217

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes (2), No. 30521 ANSP Moore, 1962, p. 45

***Linga hamata* (Dall)**

Lucinidae

- Phacoides* (Here) *hamatus* Dall, 1903a, p. 1364, pl. 50, fig. 9; Schuchert, et al., 1905, p. 496; Chavan, 1937, pp. 148, 149= ? *Linga carinifera* (Conrad)
- Lucina hamatus* (Dall), Harris, 1919, p. 112, pl. 37, fig. 24 copy Dall, questions locality
- "*Phacoides*" *hamatus* Dall, Stewart, 1930, p. 178

Range.—Middle Eocene. Cook Mt. fm. (upper Lisbon fm.) (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 129633 USNM

***Linga* (*Cavilinga*) *pomilia* (Conrad)**

Lucinidae

- Lucina pomilia* Conrad, 1833c, p. 40, (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 17; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386 as *pumilia*; Conrad, 1866a, p. 6; not Aldrich, 1886, p. 57; de Gregorio, 1890, p. 206, pl. 29, figs. 11, 12 copies Conrad; Harris, 1895b, p. 36; Harris, 1897b, p. 70 in part, not pl. 14, figs. 3, 3a, 3b; Harris, 1919, p. 115, pl. 38, figs. 6-11; Brann and Kent, 1960, pp. 510, 511
- Lucina impressa* Lea, 1833, p. 37, pl. 1, fig. 30; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386 under *L. pumilia*; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 203, pl. 28, figs. 3-9, 15 copy Lea; Cossmann, 1893, p. 12 in part; Harris, 1895b, p. 22 (= *L. pomilia* Conrad)
- Cyclas pomilia* (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8
- Cyclas impressa* (Lea), Conrad, 1865a, p. 8
- Lucina impressa* var. *postsulcata* de Gregorio, 1890, p. 203, pl. 28, fig. 14; Harris, 1919, p. 201 individual variation
- Lucina impressa* var. *sublaevigata* de Gregorio, 1890, p. 203, pl. 28, figs. 10-11; Harris, 1919, p. 201 *L. parilis* error
- Linga* (*Cavilinga*) *pomilia* (Conrad), Chavan, 1937, pp. 148, 149, 151, 200; Chavan, 1938, p. 217, with *L. impressa* Lea as var.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (4), No. 30524, Moore, 1962, p. 88. Holotype *L. impressa* No. 5155 ANSP. Holotype *L. impressa sublaevigata* de Gregorio, No. 26455 De Gregorio Coll., PRI

Linga (Cavilinga) pomilia alveata (Conrad)

Lucinidae

Lucina alveata Conrad, 1833c, p. 40 (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 402, pl. 4, fig. 12; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; de Gregorio, 1890, p. 204, pl. 28, fig. 20 copy Conrad; Harris, 1895b, p. 4

Lucina lunata Lea, 1833, p. 58, pl. 1, fig. 32; Conrad, App. in Morton, 1834, p. 7=*L. alveata* Conrad; H. C. Lea, 1849, p. 101; Harris, 1895b, p. 26=*L. alveata* Conrad

Cyclas alveata (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8

Lucina impressa var. *subcuneata* de Gregorio, 1890, p. 203, pl. 28, figs. 12, 13

Lucina pomilia alveata Conrad, Harris, 1919, p. 115, pl. 38, figs. 12-16; Brann and Kent, 1960, p. 511

Linga (Cavilinga) pomilia alveata (Conrad), Chavan, 1937, pp. 151, 200; Chavan, 1938, p. 217

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, *L. alveata* Conrad, No. 30510 ANSP Moore, 1962, p. 37. Syntypes *L. lunata* Lea, Nos. 5179, 5180 ANSP. Holotype, *L. impressa subcuneata* de Gregorio, No. 26452 De Gregorio Coll. PRI

Linga (Cavilinga) pomilia smithi (Meyer)

Lucinidae

Lucina Smithi Meyer, 1886b, p. 81, pl. 1, fig. 23; de Gregorio, 1890, p. 207, pl. 28, fig. 16 copy Meyer; not Shimer and Shrock, 1944, p. 423; pl. 168, fig. 24 copy Clark and Martin=*L. whitei* Clark

Lucina pomilia Conrad, Harris, 1897b, p. 70, pl. 14, figs. 3, 3a, 3b; Brann and Kent, 1960 p. 510, Nos. 223, 224 only

Phacoides (Parvilucina) Smithi (Meyer), Dall, 1903a, p. 1381 in part

Lucina pomilia smithi Meyer, Harris, 1919, p. 114, pl. 38, figs. 1 copy

Meyer, 2-5; Brann and Kent, 1960, p. 511

Linga (Cavilinga) pomilia Smithi (Meyer), Chavan, 1937, p. 200

Range.—Lower Eocene. Nanjemoy fm.; Bashi mem., Hatchetigbee fm, upper Wilcox [Sabine] gr. Middle Eocene. Gosport sd.

("type") uppermost Claiborne gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Monroe Co., Claiborne Bluff, Alabama R. (type). VA.: Hanover Co., Newcasttle, S. side of Pamunkey R., ¾-1 mi. E. of bridge on U.S. 360

Meyer gave Claiborne [Gosport sand] as type locality. Harris stated and illustrated that specimens from the Wilcox (Sabine) shells compare better with Meyer's figure.

Type.—Holotype, No. 638846 USNM

Lirodiscus jacksonensis (Meyer)

Astartidae

Astarte parilis Conrad in Wailes, 1854, p. 289, pl. 14, fig. 2 figured only (reprint, 1939, p. 19, pl. 1, fig. 2); Conrad, 1865a, p. 9; Conrad, 1866a, p. 23; not *Astarte parilis* Conrad, 1853a, p. 276 (Dall reprint,

- 1909, p. 161=Monmouth Co., N.J. Cretaceous); Hilgard in Hopkins, 1871, p. 11
Astarte sulcata var. *jacksonensis* Meyer, 1885a, p. 460 (incomplete description)
Lirodiscus Wailesii Dall, 1903a, p. 1483, pl. 57, fig. 21; Schuchert, et al., 1905, p. 368
Astarte (Lirodiscus) jacksonensis Meyer, Harris and Palmer, 1946, p. 77, pl. 18, figs. 1-5, 8-10; Brann and Kent, 1960, p. 93
Lirodiscus jacksonensis (Meyer), Harris, 1951, p. 20, pl. 10, fig. 5; Brann and Kent, 1960, p. 499

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Crystal R. fm., upper Ocala gr.

Localities.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type). ARK.: *Cleveland Co.*, Vince Ferry, Saline R. LA.: *Caldwell Par.*, Gibson Ldg., Ouachita R.; *Grant Par.*, Montgomery, Red R. TEXAS: *Sabine Co.*, Robinson's Ferry, Sabine R. FLA.: *Marion Co.*, dump SW. of office and mill Dixie Lime Products Co., Reddick

Types.—Syntypes (2), No. 638698 USNM, "type lot" on label. Possible holotype *Astarte parilis* Conrad, No. 13186 ANSP Moore, 1962, p. 83. Holotype *Lirodiscus wailesii* Dall, No. 1566 USNM

Lirodiscus mediavia (Harris)

Astartidae

Astarte smithvillensis var. *mediavia* Harris, 1896, p. 61 in part, pl. 5, fig. 4

Range.—Paleocene. Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.

Localities.—ALA.: *Choctaw Co.*, Naheola Ldg., Tombigbee R.; *Wilcox Co.*, Matthews Ldg., Alabama R. (type locality ?)

Type.—Holotype, No. 6234 ANSP

Lirodiscus protractus (Meyer)

Astartidae

Astarte protracta Meyer, 1886b, p. 80, pl. 3, figs. 18, 18a; Cossmann, 1893, p. 13; Dall, 1900, p. 1199, pl. 43, fig. 3 figured only; Schuchert, et al., 1905, p. 69 = *Lirodiscus protractus* (Meyer)

Lirodiscus protractus (Meyer), Dall, 1903a, p. 1484 in part; Schuchert, et al., 1905, p. 368; Harris, 1919, p. 90, pl. 32, figs. 2, 2a copies Meyer, fig. 3 copy Dall

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, Enterprise "upper bed", Meyer (type). ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. *vide* Dall, 1900, p. 1199

Type.—Holotype, No. 638845 USNM

Lirodiscus (Crustuloides) psychopterus (Dall)

Astartidae

Crassatellites (Scambula) psychopterus Dall, 1900, p. 1198, pl. 42, figs. 8, 9 (figured only); Dall, 1903a, p. 1470; Schuchert, et al. 1905, p. 175

Lirodiscus (Crustuloides) psychopterus (Dall), Harris, 1919, p. 89, pl. 32, figs. 1, 1a, 1b; Brann and Kent, 1960, p. 499

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr. *Localities*.—MISS.: *Clarke Co.*, Wautubbee (type); [?] Co., "Johnson's place" (location unknown)

Type.—Holotype, No. 107451 USNM

Lirodiscus santeensis Harbison**Astartidae**

Lirodiscus santeensis Harbison, 1944, p. 4, pl. 2, fig. 3

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. (*fide* Cooke and MacNeil, 1952, p. 20)

Locality.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

Type.—Holotype, No. 16144 ANSP

Lirodiscus smithvillensis (Harris)**Astartidae**

Astarte conradi Buckley, 1874, p. 63 *fide* Harris, 1895a, p. 48. Not *A. conradi* Dana, 1863

Crassatella alta Conrad (young), Heilprin, 1884b, p. 38 *fide* Harris, 1895a, p. 48. See Stenzel, Krause, and Twining, 1957, p. 126 =

Kymator lapidosus (Conrad), see *Pteropsella lapidosa* (Conrad)

Astarte tellinoides Conrad, Heilprin, 1891a, p. 402

Astarte smithvillensis Harris, 1895a, p. 48, pl. 1, figs. 8, 8a, 9, a-c

Astarte smithvillensis Harris "var.", Harris, 1897a, p. 475 in part, not pl. 20, fig. 6; Harris, 1897b, p. 56, in part description and synonymy only, not pl. 11, fig. 2; Brann and Kent, 1960*, pp. 93, 94 read "figured specimens" for "syntypes"

Not *Astarte smithvillensis* Harris, 1899b, p. 302, pl. 53, fig. 7 see

Lirodiscus smithvillensis "var." Harris

Lirodiscus smithvillensis (Harris), Harris, 1919, p. 89, pl. 31, figs. 17-23; Brann and Kent, 1960, p. 499

Range.—Middle Eocene. Reklaw fm., lower Claiborne gr.; Weches fm. (type), middle Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type); Devil's Eye, Colorado R., 8 mi. SE. of Bastrop; *Nacogdoches Co.*, 15 mi. SE. of Nacogdoches; *Burleson Co.*, Colliers Ferry, Brazos R.

Type.—Not found 1962, Bur. Ec. Geol., Univ. of Texas

Lirodiscus smithvillensis "var." (Harris)**Astartidae**

Astarte smithvillensis var. Harris, 1897a, p. 475 in part, pl. 20, fig. 6;

Harris, 1897b, p. 56 in part, pl. 11, fig. 2 same as Harris, 1897a;

Harris, 1899b, p. 302, pl. 53, fig. 7 same as Harris, 1897a, and 1897b

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.; *Dale Co.*, Ozark. LA.: *Sabine Par.*, La Nana Bayou, near Many (Harris)

Type.—Figured specimen, ANSP

Lirodiscus tellinoides (Conrad)**Astartidae**

Astarte tellinoides Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, Harris reprint, 1893, pl. 19, fig. 2; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 382, Tuomey, 1850, p. 148 *cellinoides sic*; Tuomey, 1858, pp. 264, 273; Conrad 1865a, p. 9; Conrad,

1866a, p. 5; not Aldrich, 1886, p. 53; Harris, 1895b, p. 44

Astarte Nicklinii Lea, 1833, p. 61, pl. 2, fig. 35; Conrad, App. in Morton, 1834, p. 8 = *A. tellinoides* Conrad; H. C. Lea, 1849, p. 96;

d'Orbigny, 1850, p. 382 under *tellinoides*; Conrad, 1865a, p. 9 under *tellinoides*; de Gregorio, 1890, p. 199, pl. 27, figs. 6-11; fig.

12 copy Lea *A. sulcata*; fig. 13 copy Lea; figs. 14-19; Cossmann, 1893, p. 13; Harris, 1895b, p. 30 (= *A. tellinoides* Conrad)

Astarte sulcata Lea, 1833, p. 62, pl. 2, fig. 36; Conrad, App. in Morton, 1834, p. 8 (= *A. tellinoides* Conrad); H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 382 (= *A. tellinoides*); Conrad, 1865a, p. 9 under *tellinoides*; Harris, 1895b, pp. 39, 44 (= *A. tellinoides* Conrad)

Lirodiscus tellinoides (Conrad), Conrad, 1869c, p. 47; Dall, 1903a, p. 1483; Dall, 1903b, p. 935; Harris, 1919, p. 90, pl. 32, figs. 4-11; Gardner, 1945, p. 89; Harris and Palmer, 1946, p. 78, pl. 18, fig. 6 same as Harris, 1919, pl. 32, fig. 9; Brann and Kent, 1960, pp. 499, 500

Astarte Nicklinii ebla de Gregorio, 1890, p. 199

Lirodiscus tellinoides ebla (de Gregorio), Harris, 1919, p. 200

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type); Rock Branch, near Monroeville (Tuomey)

Types.—Possible syntypes (6), No. 30563 ANSP Moore, 1962, p. 101

Lirodiscus tellinoides ebla (de Gregorio)

See *Lirodiscus tellinoides* (Conrad)

***Lirodiscus tellinoides scutellarius* Harris**

Astartidae

Astarte (*Lirodiscus*) *tellinoides scutellaria* Harris in Harris and Palmer, 1946, p. 78, pl. 18, fig. 7; Brann and Kent, 1960, p. 500

Range.—Upper Eocene. *Scutella* bed (type), Jackson gr.

Locality.—ALA.: Monroe Co., *Scutella* bed at Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 4295, PRI

***Lirodiscus virginianus* Van Winkle**

Astartidae

Lirodiscus virginianus Van Winkle, 1921, p. 8, pl. 1, fig. 1; Brann and Kent, 1960, p. 500

Range.—Lower Eocene. Nanjemoy fm. (type)

Locality.—VA.: Hanover Co., Newcastle, S. side Pamunkey R., ¾-1 mi. E. of bridge on U. S. 360 (type)

Type.—Holotype, No. 295 PRI

Lirodiscus wailesii Dall

See *Lirodiscus jacksonensis* Meyer

Cf. *Lirodiscus* sp.

Astartidae

Astarte sp. Harris and Palmer, 1946, p. 76, pl. 18, figs. 15, 16; Brann and Kent, 1960, p. 94

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Locality.—LA.: Grant Par., Montgomery Ldg., Red R.

Type.—Figured specimen, No. 4299 (lost) PRI

Lithodomus claibornensis Conrad

See *Lithophaga claibornensis* (Conrad)

Lithodomus gainesensis Harris

See *Lithophaga gainesensis* (Harris)

Lithodomus inflatus Whitfield

See *Modiolus subinflatus* (Whitfield)

Lithodomus petricoloides (Lea)See *Lithophaga* ? *petricoloides* (Lea)*Lithodomus politus* Tuomey, 1848, p. 154; Harris, 1919, p. 201 *nomen nudum***Cf. *Lithophaga claibornensis* (Conrad)****Mytilidae***Lithodomus claibornensis* Conrad, 1848b, p. 132, pl. 14, fig. 7; de Gregorio, 1890, p. 185, pl. 22, fig. 3 copy Conrad; Harris, 1895b, p. 11; Aldrich, 1895b, p. 17, pl. 5, fig. 14*Lithophaga claibornensis* (Conrad), Conrad, 1865a, p. 11; Conrad, 1866a, p. 5; Dall, 1898b, p. 801; Harris, 1919, p. 34, pl. 17, fig. 10 copy Aldrich, fig. 11 copy Conrad*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Types*.—Syntypes (2), No. 30663 ANSP Moore, 1962, p. 47***Lithophaga gainesensis* (Harris)****Mytilidae***Lithodomus gainesensis* Harris, 1896, p. 50, pl. 3, figs. 7, 7a; Brann and Kent, 1960, p. 501*Lithophaga gainesensis* (Harris), Dall, 1898b, p. 801, ? *Botula**Range*.—Paleocene. Uppermost ls. beds Midway gr. exposed at Ft. Gaines (type)*Locality*.—GA.: Clay Co., Fort Gaines (type)*Types*.—Syntypes, Nos. 57, 58 PRI*Lithophaga* ? *houstonia* (Harris)See *Mauricia houstonia* (Harris)**Cf. *Lithophaga marylandica* Clark and Martin****Mytilidae***Solemya petricoloides* (Lea), Clark, 1895, p. 5; Clark, 1896, p. 74"Not *Byssomya petricoloides* Lea, 1833", Clark and Martin, 1901, p. 186*Lithophaga marylandica* Clark and Martin, 1901, p. 186, pl. 43, fig. 7*Range*.—Paleocene. Aquia fm. (type)*Localities*.—MD.: Charles Co., Clifton Beach (type). VA.: King George Co., Woodstock*Type*.—Holotype, USNM***Lithophaga* ? *petricoloides* (Lea)****Mytilidae***Byssomya petricoloides* Lea, 1833, p. 48, pl. 1, fig. 16; H. C. Lea, 1849, p. 97; de Gregorio, 1890, p. 236, pl. 38, fig. 25 copy Lea; Cossmann, 1893, p. 5 genus ? Harris, 1895b, p. 34*Lithodomus petricoloides* (Lea), de Gregorio, 1890, p. 184, pl. 22, figs. 6 copy Lea, figs. 7a, 7b; Cossmann, 1893, p. 17 = *L. claibornensis* Conrad ?Not *Solemya petricoloides* (Lea), Clark, 1895, p. 5; Clark, 1896, p. 74 = Cf. *Lithophaga marylandica* Clark and Martin*Lithophaga petricoloides* (Lea), Dall, 1898b, p. 801; Harris, 1919, p. 34, pl. 17, figs. 12, 13 copies De Gregorio*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 5074 ANSP

Lithophaga sp.**Mytilidae**

Lithophaga sp. Gardner, 1935, p. 148

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Uvalde Co.*, Frio R., $\frac{1}{2}$ and $\frac{3}{4}$ mi. NW. of the Evans' (Myrick's) apiary

Type.—Unfigured specimen not found USNM, 1962

Lopha Roeding (Bolten), 1798, p. 168 is used by authors for *Alec-tryonia* Fischer von Waldheim, 1807, p. 269. Same type species *O. cristigalli* Linné

See Stenzel, 1947, p. 177

Loripes subvexa Conrad

See *Eophysema subvexa* (Conrad)

See also "*Anodontia* ?" *augustana* Gardner

See also "*Lucina*" *sylvaerupis* Harris

Loripinus ozarkanus (Harris)

See *Eophysema ozarkana* (Harris)

Loripinus (*Eophysema*) *subvexa* (Conrad)

See *Eophysema subvexa* (Conrad)

Lucina alveata Conrad

See *Linga* (*Cavilinga*) *pomilia alveata* (Conrad)

Lucina amica de Gregorio

See *Linga* (*Cavilinga*) *amica* (de Gregorio)

Lucina aquiana Clark

See cf. *Saxolucina aquiana* (Clark)

Lucina ? astartiformis Aldrich**? Lucinidae**

? *Lucina astartiformis* Aldrich, 1897a, p. 15, pl. 5, figs. 1, 1a; Harris, 1897b, p. 72, pl. 14, figs. 8, 8a copy Aldrich; Clark and Martin, 1901, p. 175, pl. 37, figs. 2, 2a

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Nanjemoy fm.

Localities.—ALA.: *Clarke Co.*, Choctaw Corner (type). MD.: *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R. R. Sta.); 1 mi. SE. of Piscataway

Type.—Holotype, No. 638997 USNM

Lucina atoma Casey**Lucinidae**

Lucina atoma Casey, 1902a, p. 716

Range.—Upper Eocene. Jackson gr. (type) (or Vicksburg Oligocene)

Locality.—LA.: *Grant Par.*, Kimbrel's about $1\frac{1}{2}$ mi. below Montgomery, Red R. (type)

Types.—Syntypes (3), No. 639011 USNM

"Lucina" bisculpta Meyer**Lucinidae**

Lucina bisculpta Meyer, 1886b, p. 81, pl. 1, figs. 30, 30a; de Gregorio, 1890, p. 207, pl. 28, figs. 17, 18 copy Meyer; Dall, 1903a, p. 1364 =

Phacoides (*Here*) *pomilius* (Conrad) in part; Cossmann, 1893, p. 12

Lucina ?; Harris, 1919, p. 117, pl. 38, figs. 22, 23 copy Meyer, "var. of *L. papyracea*"

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638847 USNM

Lucina carinifera Conrad

See *Linga carinifera* (Conrad)

Lucina claibornensis (Conrad)

See *Saxolucina (Plastomiltha) claibornensis* (Conrad)

Lucina claytonia Harris

See *Saxolucina claytonia* (Harris)

Lucina compressa Lea

See *Eomiltha pandata* (Conrad)

Lucina convexa Dall, Harris, 1919, p. 118 typographical error for *L. subvexa* Conrad

Lucina cornuta Lea

See *Linga carinifera* (Conrad)

Lucina curta (Conrad)

See *Myrtea ? curta* (Conrad)

See also *Lucina (Callucina) uhleri* Clark

Lucina dartoni Clark

Lucinidae

Lucina dartoni Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 20, figs. 2a-c; Clark and Martin, 1901, p. 175, pl. 37, figs. 3, 3a, 3b holotype

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., Popes Cr.; 2½ mi. above Popes Cr.

VA.: King George Co., Woodstock (type)

Type.—Holotype, USNM

Lucina dartoni Harris, 1919, not Clark

See *Eophysema ozarkana* (Harris)

Lucina (Recurvella) dolabra Conrad

Lucinidae

Lucina dolabra Conrad, 1833a, p. 343; Conrad, 1833c, p. 40 (Harris reprint 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 386; Conrad, 1865a, p. 8 [under *Cyclas*]; Conrad, 1866a, p. 6; Harris, 1895b, p. 16; Harris, 1919, p. 111, pl. 37, figs. 17-21; Brann and Kent, 1960, p. 506

Astarte recurva Lea, 1833, p. 61, pl. 2, fig. 34; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 386 under *L. dolabra*; Tuomey, 1858, pp. 264, 273; Harris, 1895b, p. 39 (= *L. dolabra* Conrad)

Cyclas dolabra (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8 [L.]

Lucina recurva (Lea), de Gregorio, 1890, p. 202, pl. 27, figs. 36-40; fig. 41 copy Lea; Cossmann, 1893, p. 11

"Here" (or *Lucina*) *dolabra* Conrad, Chavan, 1937, p. 204

Lucina (Recurvella) dolabra Conrad, Chavan, 1937, p. 246

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (6), No. 30523 ANSP Moore, 1962, p. 55

Lucina fortidentalis Harris

See *Saxolucina (Plastomiltha) fortidentalis* (Harris)

Lucina (Plastomiltha) gaufia Harris

See *Saxolucina (Plastomiltha) gaufia* (Harris)

Lucina greggi Harris in part

See *Saxolucina greggi* (Harris)

See also cf. *Saxolucina aquiana* (Clark)

Lucina hamatus (Dall)

See *Linga hamatus* (Dall)

Lucina impressa Lea

See *Linga (Cavilinga) pomilia* (Conrad)

Lucina impressa var. *postsulcata* de Gregorio

See *Linga (Cavilinga) pomilia* (Conrad)

Lucina impressa var. *subcuneata* de Gregorio

See *Linga (Cavilinga) pomilia alveata* (Conrad)

Lucina impressa var. *sublaevigata* de Gregorio

See *Linga (Cavilinga) pomilia* (Conrad)

Lucina (Sphaerella) inflata (Lea)

See *Diplodonta inflata* (Lea)

Lucina (Sphaerella) inflata (Lea) var. *paruminflata* de Gregorio

See *Diplodonta inflata* (Lea)

Lucina lirata Phillips

See under *Corbis lirata* (Conrad)

Lucina lunata Lea

Linga (Cavilinga) pomilia alveata (Conrad)

Lucina lyrata [sic] Phillips in D'Archiac, 1843

See under *Corbis lirata* (Conrad)

Lucina (Pseudomiltha) megameris Dall

See *Pseudomiltha megameris* Dall

Lucina modesta Conrad

See *Lucina (Callucina) papyracea* Lea

Lucina ozarkana Harris

See *Eophysema ozarkana* (Harris)

Lucina (Eophysema) ozarkana ? var. Harris

See *Eophysema ozarkana* (Harris) ? var.

Lucina pandata Conrad

See *Eomiltha pandata* (Conrad)

Lucina (Callucina) papyracea Lea**Lucinidae**

Lucina papyracea Lea, 1833, p. 58, pl. 1, fig. 31; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 387; Conrad, 1866a, p. 6; de Gregorio, 1890, p. 205, pl. 28, fig. 21 copy Lea; figs. 22-28; Cossmann, 1893, p. 12; Harris, 1895b, p. 32; Harris, 1919, p. 116, pl. 38, figs. 17-21; Brann and Kent, 1960, p. 510

Lucina modesta Conrad, 1846c, p. 403, pl. 4, fig. 13; H. C. Lea, 1849, p. 101; Conrad, 1866a, p. 6; d'Orbigny, 1850, p. 386; de Gregorio, 1890, p. 205, pl. 28, fig. 19 copy Conrad; Harris, 1895b, p. 28 (= *L. papyracea* Lea); not Dall, 1903a, p. 1364

Cyclas modesta (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 8

Cyclas papyracea (Lea), Conrad, 1865a, p. 8

Lucina (Callucina) papyracea Lea, Chavan, 1937, p. 253

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5164 ANSP see Harris 1919 p. 117. Type

Lucina modesta Conrad missing ANSP Moore, 1962, p. 78

Lucina "parilis" [sic] sublaevigata de Gregorio in Harris, 1919, p. 201 error for *pomilia*

See *Linga (Cavilinga) pomilia* (Conrad)

Lucina perminuta Casey**Lucinidae**

Lucina perminuta Casey, 1902a, p. 716

Range.—Upper Eocene. Jackson gr. (type) (or Vicksburg Oligocene)

Locality.—LA.: Grant Par., Young's Bluff, 5 mi. below Montgomery, Red R. (type)

Types.—Syntypes (2), No. 639012 USNM

Lucina perovata (Dall), Harris, 1951

See *Lucina* sp.

Lucina pomilia Conrad

See *Linga (Cavilinga) pomilia* (Conrad)

Lucina pomilia Conrad, Harris, 1897b

See *Linga (Cavilinga) pomilia smithi* (Meyer)

Lucina pomilia alveata Conrad

See *Linga (Cavilinga) pomilia alveata* (Conrad)

Lucina pomilia smithi Meyer

See *Linga (Cavilinga) pomilia smithi* (Meyer)

"Lucina" primoidea Aldrich**Lucinidae**

Lucina primoidea Aldrich, 1921, p. 19, pl. 2, figs. 23, 24

Range.—Paleocene. Porters Creek fm. (type), upper Midway gr.

Locality.—ALA.: Sumter Co., Black Bluff, Tombigbee R. (type)

Type.—Holotype, GSATC [disintegrated]

Lucina recurva (Lea)

See *Lucina (Recurvella) dolabra* Conrad

Lucina rotunda Lea

See *Epilucina rotunda* (Lea)

Lucina rotunda Lea, Aldrich, 1886

See *Epilucina* sp.

Lucina smithi Meyer

See *Linga (Cavilinga) pomilia smithi* (Meyer)

Lucina smithi Meyer, Shimer and Shrock, 1944; not Meyer, 1886b

See "*Lucina*" *whitei* Clark

Lucina (Myrtea ?) subcurta Harris

See *Myrtea ? subcurta* Harris

Lucina subvexa Conrad

See *Eophysema subvexa* (Conrad)

Lucina subvexa Conrad, Dall, 1903a

See *Eophysema ozarkana* (Harris),

See also *Eophysema subvexa* (Conrad)

Lucina (Loripes) subvexa Conrad, Harris, 1919

See "*Anodontia ?*" *augustana* Gardner

See also *Eophysema subvexa* (Conrad)

See also "*Lucina*" *sylvaerupis* Harris

Lucina (Loripes) subvexa Conrad variations Harris

See *Anodontia ? augustana* Gardner, 1951

The specimens figured by Harris, 1919, pl. 39, figs. 2, 4, (PRI Nos. 760, 762) have been compared with topotypes of *A. augustana* Gardner, and they prove to be the same species. The specimen (PRI 760) fig. 2 is one of several massed together and crushed in the same manner as the majority of the individuals of *A. augustana*. This identification establishes the formation of the Harris specimens as Tallahatta below the Tallahatta-Lisbon contact at Lisbon Bluff, Monroe Co., Ala., and not the so-called "Buhrstone", "St. Maurice", Lisbon fm. as indiscriminately originally indicated. Whether this species is related to *Loripes subvexa* Conrad, 1832, supposed to have come from Claiborne, cannot be determined. See notes under that species.

"*Lucina*" *sylvaerupis* Harris

Lucinidae

Lucina (Loripes) subvexa var. *sylvaerupis* Harris, 1919, p. 120, pl. 39, figs. 3, 5, 5a not *L. subvexa* Conrad

Lucina (Loripes) subvexa Conrad, Brann and Kent, 1960, p. 512 not hypotype. Equals holotype of *L. sylvaerupis* Harris

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm.; upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 761 PRI

Lucina symmetrica Conrad

See *Epilucina rotunda* (Lea)

Lucina symmetrica Harris, 1897b, not Conrad

See *Epilucina* sp.

Lucina (Callucina) uhleri Clark

Lucinidae

Lucina uhleri Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 21, figs. 1a-d; Clark and Martin, 1901, p. 176, pl. 37, figs. 4, 7 copies type, figs. 5, 6; Harris, 1919, p. 117 footnote (not *L. ulrichi* Harris, 1897b)

Lucina curta Conrad, Shimer and Shrock, 1944, p. 423, pl. 168, figs. 26, 27 copy Clark and Martin, *L. uhleri*

Range.—Paleocene. Aquia fm. Lower Eocene, Nanjemoy fm. (type)

Localities.—MD.: Charles Co., Popes Cr.; Clifton Beach; Glymont; 1 mi. SE. of Mason Springs; Liverpool Point; Mattawoman Cr.; Prince Georges Co., Upper Marlboro; 1 mi. NE. of Piscataway. VA.: King George Co., Woodstock (type); 2 mi. below Potomac Cr.; Potomac Cr.

Types.—Syntypes, USNM

***Lucina (Callucina) ulrichi* Harris**

Lucinidae

Lucina ulrichi Harris, 1897b, p. 71, pl. 14, figs. 5, 5a, 6 not *L. uhleri* Clark; Harris, 1919, p. 117 footnote; Brann and Kent, 1960, p. 513 syntypes not hypotypes as stated

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.

Types.—Syntypes lost, PRI

"*Lucina*" whitei Clark

Lucinidae

Lucina whitei Clark, 1895, p. 5; Clark, 1896, p. 79, pl. 20, figs. 3a-c; Clark and Martin, 1901, p. 176, pl. 37, figs. 8, 8a, 9 copies types

"*Lucina*" *whitei* Clark, Stewart, 1930, p. 187 cf. *Myrtea*

Lucina smithi Meyer, Shimer and Shrock, 1944, p. 423, pl. 168, fig. 24 copy Clark and Martin, 1901

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., W. of Port Tobacco; ½ mi. below Chapel Point. VA.: King George Co., Woodstock (type);

[?] Co., Hanoverville

Types.—Syntypes, USNM

***Lucina* sp.**

Lucinidae

Here sp. Richards in Richards and Palmer, 1953, p. 49, pl. 10, fig. 8

Range.—Middle Eocene. Avon Park ls., upper Claiborne gr.

Locality.—FLA.: Levy Co., New Lebanon dolomite pit SW. ¼ NE. ¼ sec. 12, T. 16 S., R. 16 E

Type.—Figured specimen, No. I-7564 Fla. Geol. Sur.

***Lucina* sp.**

Lucinidae

Not *Phacoides (Here) wacissanus* Dall, 1903a, p. 1365, pl. 50, fig. 15 Miocene

Here cf. *wacissana* Dall, Harris, 1951, p. 21, pl. 10, fig. 6; Brann and Kent, 1960, p. 452

Here cf. *wacissana* Dall, Richards in Richards and Palmer, 1953, p. 48, pl. 10, fig. 9

Range.—Upper Eocene. Inglis fm., lower Ocala gr., (Richards); "Ocala ls.", Ocala gr. (Harris).

Localities.—GA.: Dougherty Co., Flint R. near junction with Kinchefoonee Cr. near Albany (Harris). FLA.: Citrus Co., Dunnellon Phosphate Mining Co., SW. ¼ SE. ¼ sec. 14, T. 15 S., R. 16 E. (Richards)

Types.—Figured specimen, No. I-7563 Fla. Geol. Sur. (Richards); figured specimen, No. 24494 PRI (Harris)

Lucina sp.**Lucinidae***Lucina* ? sp., Barry 1942+, p. 64, pl. 7, fig. 12*Range*.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.*Localities*.—LA.: *Sabine Par.*, rd. cut on W. side of La. Highway 180 about 2 ½ mi. NE. of Pleasant Hill; *De Soto Par.*, rd. cut along La. Highway 745 in SW. ¼ sec. 9, T. 10 N., R. 13 W.*Type*.—Figured specimen, No. 5015 LSU Pal. Mus.**Lucina** sp.**Lucinidae***Lucina* sp., Clark and Martin, 1901, p. 177*Range*.—Lower Eocene. Nanjemoy fm.*Locality*.—MD.: *Charles Co.*, Popes Cr.*Type*.—Unfigured specimen not found JHU, 1962**Lucina** sp.**Lucinidae***Lucina* sp. Kellum, 1926, p. 23, pl. 3, fig. 7*Range*.—Upper Eocene. Castle Hayne ls., Jackson gr.*Locality*.—N. C.: *New Hanover Co.*, Wilmington; *Pender Co.*, Old Rocky Point*Type*.—Figured specimen, No. 353259 USNM**Lucina** sp.**Lucinidae**

"Lucinoid" Richards in Richards and Palmer, 1953, p. 49, pl. 10, fig. 7

Range.—Upper Eocene. Inglis fm., lower Ocala gr.*Locality*.—FLA.: *Levy Co.*, Withlacoochee R., dam Florida Power Corp., SW. ¼ SW. ¼ sec. 8, T. 17 S., R. 17 E.*Type*.—Figured specimen, No. I-7587, Fla. Geol. Sur.**"Lucina"** sp.**Lucinidae***Lucina perovata* (Dall), Harris, 1951, p. 21, pl. 10, fig. 10; Brann and Kent, 1960, p. 510 probably not *Phacoides perovatus* Dall, 1916, p. 496, pl. 84, figs. 7, 8 Miocene*Range*.—Upper Eocene. "Ocala ls.", Ocala gr.*Locality*.—GA.: *Houston Co.*, Georgia Lime Rock Corp., about 4 mi. from Perry*Type*.—Figured specimen, No. 24498 PRI*Lutetia parva* (Conrad)See *Alveinus minutus* Conrad**Lutetia texana** Harris**Kelliellidae***Lutetia texana* Harris, 1920, p. 7, pl. 17, figs. 7, 8; Gardner, 1945, p. 99 in part; Brann and Kent, 1960, p. 989*Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.*Locality*.—TEXAS: *Nacogdoches Co.*, San Augustine rd., 5.5 mi. E. of Nacogdoches Hill on E. side of Tuscon Cr. (type)*Type*.—Lost. (Brann and Kent, 1960, p. 989)*Lutraria lapidosa* ConradSee *Pteropsella lapidosa* (Conrad)

Lutraria papyria Conrad
See *Pteropsella papyria* (Conrad)

Lutraria petrosa Conrad
See *Pteropsella lapidosa* (Conrad)

Macoma danai Harris

Tellinidae

Macoma danai Harris, 1919, p. 169, pl. 51, figs. 8, 9; Brann and Kent, 1960, p. 517

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 1234 PRI

Macoma scandula (Conrad)

Tellinidae

Tellina scandula Conrad, 1834, p. 132; Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 400, pl. 4, fig. 8; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 225, pl. 35, fig. 31 copy Conrad; Cossmann, 1893, p. 9; Harris, 1895b, p. 40

Macoma scandula (Conrad), Dall, 1900, p. 1016; Harris, 1919, p. 166, pl. 50, figs. 17, 18 Conrad type

Range.—Middle Eocene. ? Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Probable holotype, No. 30585 ANSP, Moore, 1962, p. 95

Macoma sillimani (Conrad)

Tellinidae

Tellina Sillimani Conrad, App. in Morton, 1834, p. 7 listed only; Conrad, 1846c, p. 399, pl. 4, fig. 9; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224, pl. 35, fig. 35 copy Conrad; Cossmann, 1893, p. 9; Harris, 1895b, p. 41

Tellina (Metis?) Sillimani Conrad, Dall, 1900, p. 1016

Macoma sillimani (Conrad), Harris, 1919, p. 169, pl. 51, figs. 6, 7; Brann and Kent, 1960, p. 519

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 30581 ANSP, Moore, 1962, p. 96

Macrocallista annexa (Conrad)

See *Callista (Callista) annexa* (Conrad)

Macrocallista cf. ovata Rogers

See under *Pitar (Pitar) ovatus* (Rogers and Rogers)

Macrocallista subimpressa (Conrad)

Veneridae

Cytherea subimpressa Conrad, 1845b, p. 173; Conrad, 1848b, p. 130, pl. 14, fig. 26; H. C. Lea, 1849, p. 99; Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 17, figs. 1a-h

Meretrix subimpressa (Conrad), Conrad, 1854, p. 30; Clark and Martin, 1901, p. 170, pl. 33, figs. 5, 5a, 6, 7, 8, 8a, 9, 9a; Harris, 1919, p. 136, pl. 43, figs. 2, 3; Brann and Kent, 1960, p. 547

Dione subimpressa (Conrad), Conrad, 1865a, p. 7; Conrad, 1866a, p. 28

Callista (*Callista*) *subimpressa* (Conrad), Palmer, 1927/1929, p. 80, pl. 13, figs. 2, 3, 8 section *Macrocallista*; Brann and Kent, 1960, p. 154

Microcallista subimpressa (Conrad), Stewart, 1930, p. 244

Not *Pitar* cf. *subimpressa* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 6-8; not Brann and Kent, 1960, p. 694 = cf. "*Pitar*" sp.

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: *Hanover Co.*, Marlbourne (type); Newcastle, S. side of Pamunkey R., $\frac{3}{4}$ -1 mi. E. of bridge on U. S. route 360; [Co. ?], Hanoverville [? place unknown]; *King William Co.*, Piping Tree; *King George Co.*, Woodstock; *Prince George Co.*, Evergreen below City Point. MD.: *Charles Co.*, Popes Creek; *Prince Georges Co.*, 1 mi. SE. of Piscataway; Upper Marlboro, SW. of town near fork of 2 roads. Not ? GA.: *Houston Co.*, Clinchfield Quarry

Types.—Possible syntypes (3), No. 20195 ANSP, Moore, 1962, p. 98

***Macrocallista sylvaerupis* (Harris)**

Veneridae

Cytherea perovata ? Conrad, Aldrich, 1886, p. 53

Meretrix subimpressa Conrad var., Harris, 1897b, p. 63, pl. 12, figs. 6, 7 syntypes *M. sylvaerupis*; Brann and Kent, 1960, pp. 546, 547

Meretrix sylvaerupis Harris, 1919, p. 136, pl. 43, fig. 1; Brann and Kent, 1960, p. 547

Callista (*Callista*) *sylvaerupis* (Harris), Palmer, 1927/1929, p. 80, pl. 13, figs. 7, 9, 11 syntypes section *Macrocallista*; Brann and Kent, 1960, p. 155

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

Types.—Syntypes, No. 161, 162 [No. 1152 not considered syntype originally] PRI

***Macrocallista triangulata* Barry**

Veneridae

Macrocallista triangulata Barry, 1942+, p. 69, pl. 9, figs. 4-7

Range.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine] gr.

Locality.—TEXAS: *Sabine Co.*, bluff $\frac{1}{4}$ mi. down stream from Sabinetown Ferry Ldg., Sabine R. (type)

Types.—Syntypes, Nos. 5204, 5204A, LSU Pal. Mus.

***Macrocallista* ? sp.**

Veneridae

Macrocallista sp. Barry, 1942+, p. 69, pl. 9, fig. 11

Range.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

Locality.—LA.: *Sabine Par.*, R. S. Hendrick's farm in center of S. $\frac{1}{2}$ sec. 31, T. 7 N., R. 11 W.

Type.—Figured specimen, No. 5206 LSU Pal. Mus.

"*Mactra Alabamiensis* Lea", Conrad, App. in Morton, 1834, p. 8 is a *nomen nudum*. This was a mistake by Conrad. Lea did not give such a name.

Mactra albirupina Harris

See *Spisula albirupina* (Harris)

Macra decisa Conrad

See *Spisula decisa* (Conrad)

Macra dentata Lea

See *Pteropsella papyria* (Conrad)

Macra Grayi Lea

See *Mactropsis aequorea* (Conrad)

Macra inornata Meyer

Mactridae

Macra inornata Meyer, 1885a, pp. 461, 467; Harris in Harris and Palmer, 1946, p. 109

Species described but never figured.

Range.—Upper Eocene. Jackson gr. (type)

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Missing. Apparently never at JHU, *fide* USNM, 1962

Macra (Spisula) jacksonensis Cooke

See *Spisula jacksonensis* Cooke

Macra mississippiensis Conrad var.

See *Spisula mississippiensis* (Conrad) subsp.

Macra (Spisula) parilis Conrad

See *Spisula parilis* (Conrad)

Macra (Cyrena ?) parilis Mut. *subaequilatera* de Gregorio

See *Spisula parilis* (Conrad)

Macra parilis Mut. *subcuneata* de Gregorio

De Gregorio, 1890, p. 228, pl. 36, figs. 6-9; Harris, 1919, p. 201

parilia [sic] error for *parilis*

See *Spisula parilis* (Conrad)

Macra parilis Mut. *subtruncata* de Gregorio

De Gregorio, 1890, p. 227, pl. 36, figs. 6-9 same plate reference as *subcuneata*. De Gregorio evidently mixed the names.

See *Spisula parilis* (Conrad). Explanation of pl. 36, figs. 6-9 gives *subtruncata*.

Macra praetenuis Conrad

See *Spisula praetenuis* (Conrad)

See also cf. *Spisula praetenuis* (Conrad)

See also *Spisula parilis bistriata* (Harris)

Macra praetenuis bistriata Harris

See *Spisula parilis bistriata* (Harris)

Macra pygmaea Lea

See *Spisula parilis* (Conrad)

"Macra" texana Conrad

Mactridae

Macra texana Conrad, 1857, p. 148, pl. 4, figs. 1a, 1b; Schuchert, *et al.*, 1905, p. 386

Range.—?Eocene

Locality.—TEXAS: *Zapata, Starr, or Webb Co.*, prairie between Laredo and Rio Grande City

Types.—Syntypes No. 9855 USNM

Mactrella praetenuis (Conrad)

See *Spisula praetenuis* (Conrad)

Mactropsis aequorea (Conrad)**Mactridae**

Erycina aequorea Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 11); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris 1895b, p. 2

Mactra Grayii Lea, 1833, p. 42, pl. 1, fig. 10; Conrad, App. in Morton, 1834, p. 8 = *Erycina aequorea* Conrad; H. C. Lea, 1849, p. 101; Harris, 1895b, p. 21

Triquetra aequorea (Conrad), Conrad, 1846b, p. 218, pl. 1, fig. 5 (not pl. 2 as in text)

Mactropsis aequorea (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 5; Conrad 1866a, p. 7; de Gregorio, 1890, p. 229, pl. 36, figs. 13-17, 18 copy Conrad, fig. 19 copy Lea *M. Grayii*; Cossmann, 1893, p. 8; Dall, 1895a, p. 213; Dall, 1898b, pp. 896, 911; Harris, 1919, p. 177, pl. 54, figs. 7-9; Brann and Kent, 1960, p. 523

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Holotype, missing ANSP, Moore, 1962, p. 35. Syntypes *Mactra Grayii* Lea, Nos. 5026, 5027 ANSP

Mactropsis olsoni Van Winkle**Mactridae**

Mactropsis Olsoni Van Winkle, 1921, p. 8, pl. 1, figs. 4, 5; Brann and Kent, 1960, p. 524

Range.—Lower Eocene. Nanjemoy fm. (type)

Locality.—VA.: Hanover Co., Newcastle, S. side Pamunkey R., $\frac{3}{4}$ -1 mi. E. of bridge on U. S. 360 (type)

Type.—Holotype, No. 297 PRI

Mactropsis rectilinearis (Conrad)**Mactridae**

Erycina rectilinearis Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 10); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 39

Triquetra rectilinearis (Conrad), Conrad, 1846b, p. 218, pl. 1, fig. 8 (not pl. 2 as in text)

Mactropsis rectilinearis (Conrad), Conrad, 1854, p. 30; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 229, pl. 36, fig. 20 copy Conrad; Cossmann, 1893, p. 8; Dall, 1898b, pp. 896, 911; Harris, 1919, p. 177, pl. 54, figs. 10-12; Brann and Kent, 1960, p. 524

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (3), No. 20221 ANSP, Moore, 1962, p. 93

Marcia (*Mercimonia*) *mercenaroidea* (Aldrich)

See *Mercimonia* ? *mercenaroidea* (Aldrich)

Marcia (*Katelysia*) *retisculpta* (Meyer)

See *Textivenus retisculpta* (Meyer)

Margaritaria inexpectens Vokes**Margaritariidae**

Margaritaria inexpectens Vokes, 1964, p. 140, pl. 1, fig. 4

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—LA.: *Grant Par.*, Creole Bluff, Red River, near Montgomery

Type.—Holotype, No. 644668 USNM

Martesia dalli [sic] Harris, Dall, 1898b, p. 820

See *Gastrochaena dalliana* (Harris)

Martesia dalliana Harris

See *Gastrochaena dalliana* (Harris)

Martesia elongata Aldrich**Pholadidae**

Martesia elongata Aldrich, 1886, p. 37, pl. 4, figs. 10, 10a, 10b; de Gregorio, 1890, p. 237, pl. 38, figs. 18-20 copies Aldrich; Cossmann, 1893, p. 5; Harris, 1897b, p. 69, pl. 14, fig. 1 copy Aldrich; Dall, 1898b, p. 820

Range.—Lower Eocene. Bells Ldg. mem. (type), Tusahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Wilcox Co.*, Yellow Bluff, Alabama R. (type)

Type.—Holotype, No. 638793 USNM

Martesia ? laredoensis Gardner**Pholadidae**

Martesia ? laredoensis Gardner, 1923, p. 114, pl. 32, fig. 10 (not given in text)

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: *Webb Co.*, $\frac{1}{4}$ mi. S. of Espejo ranch, S. of Laredo (type)

Type.—Holotype, No. 352273 USNM

Martesia recurva Aldrich**Pholadidae**

Martesia recurva Aldrich, 1921, p. 19, pl. 2, figs. 25, 26

Range.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.

Locality.—ALA.: *Dale Co.*, Fleming's Mill on Pea R. near center sec. 7, T. 7 N., R. 23 E., near Beck Mill

Type.—Holotype, No. 60 GSATC

Martesia texana Harris**Pholadidae**

Martesia texana Harris, 1895a, p. 53, pl. 3, fig. 6; Dall, 1898b, p. 820; Harris, 1919, p. 196, pl. 59, fig. 5 copy type

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Cherokee Co.*, 2 mi. E. of Alto (type) (locality not located, see Stenzel, Krause, and Twining, 1957, p. 163)

Type.—Holotype, No. 35569 BEG

Martesia sp.**Pholadidae**

Martesia sp. Gardner, 1935, p. 195

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Caldwell Co.*, 6 mi. N. of Lockhart (USGS Sta. 11682)

Type.—Unfigured specimen not found USNM, 1962

Mauricia houstonia (Harris)**Mytilidae**

Modiola houstonia Harris, 1895a, p. 46, pl. 1, fig. 1; Gimbrede, 1962, p. 1119

Lithophaga ? *houstonia* (Harris), Dall, 1898b, pp. 798, 801

Modiolus (*Mauricia*) *houstonius* (Harris), Harris, 1919, p. 32, pl. 17, figs. 5, 5a type; Gimbrede, 1962, p. 1118

Modiolus houstonius (Harris), Renick and Stenzel, 1931, p. 104

Mauricia houstonia (Harris), Stenzel, Krause, and Twining, 1957, p. 75, pl. 7, figs. 2-8

Range.—Middle Eocene. Stone City beds, middle Claiborne gr.; Hurricane lentil (type), Wheelock mem., Cook Mt. fm., upper Claiborne gr.; McBean fm. (Harris), upper Claiborne gr.

Localities.—TEXAS: *Houston Co.*, Hurricane Bayou, 3 mi. NE. of Crockett, [Bur. Econ. Geol. loc. No. 113-T-2] (type), see Stenzel, Krause, and Twining, 1957, p. 76; *Burleson Co.*, Stone City Bluff, Brazos R. LA.: *Lincoln Par.*, Chautauqua (Harris). S. C. *Orangeburg Co.*, 5 mi. NW. of Orangeburg (Harris)

Type.—Holotype, No. 145 BEG

Mauricia leonia Stenzel and Krause**Mytilidae**

Mauricia leonia Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 77, pl. 7, fig. 1

Range.—Middle Eocene. Mount Tabor mem. (type), Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: *Leon Co.*, Middleton—Sulphur Springs School county road (Bur. Ec. Geol. loc. no. 145-T-80) (type)

Type.—Holotype, No. 20637 BEG

Meiocardia carolinae Harris**Glossidae**

Meiocardia carolinae Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, figs. 5, 6; Harris, 1919, p. 135, pl. 42, fig. 11; Kellum, 1926, p. 24; Brann and Kent, 1960, p. 539

Meiocardia carolina Harris, Richards, 1950, p. 18

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. Upper Eocene. Castle Hayne ls., (type), Jackson gr. [syntypes from two localities, to be differentiated]

Localities.—S. C.: *Orangeburg Co.*, Eutaw Springs (type). N. C.: *New Hanover Co.*, Castle Hayne Quarry near Wilmington (type); *Craven Co.*, Neuse R., 17 miles above New Bern

Types.—Syntypes, No. 1405 PRI (one syntype, pl. 2, fig. 6 missing)

Melina sp.

See *Isognomen cornelliana* (Harris)

Mercimonia ? **mercenaroidea** (Aldrich)**Veneridae**

Dosinia mercenaroidea Aldrich, 1887, p. 82; Aldrich, 1897a, p. 6, pl. 1, figs. 10, 10a

Cf. *Meretrix mercenaroidea* (Aldrich), Dall, 1903a, p. 1234

Clementia mercenaroidea (Aldrich), Harris, 1919, p. 151, pl. 47, figs. 8-11; Brann and Kent, 1960, p. 233

Marcia (*Mercimonia*) *mercenaroidea* (Aldrich), Palmer, 1927/1929, p. 137, pl. 24, figs. 11, 15a, 16; Brann and Kent, 1960, p. 526

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type). S. C.: Orangeburg Co., 3 mi. WNW. of Orangeburg (Harris)

Types.—Syntypes, Nos. 638856, 638857 USNM

Meretrix aequorea (Conrad)

See *Callista* (*Costacallista*) *aequorea* (Conrad)

Meretrix aequorea trigoniata (Lea)

See *Katherinella trigoniata* (Lea)

Meretrix angelinae Harris

See *Pitar angelinae* (Harris)

Meretrix annexa (Conrad)

See *Callista* (*Callista*) *annexa* (Conrad)

Meretrix cornelli Harris

See *Pitar* (*Pitar*) *cornelli* (Harris)

Meretrix Dalli Cossmann

See *Gratelupia* (*Cytheriopsis*) *hydana* (Conrad)

Meretrix discoidalis (Conrad)

See *Rhadopitaria discoidalis* (Conrad)

Meretrix eversa (Conrad)

See *Pitar eversus* (Conrad)

Meretrix exigua (Conrad)

See *Pitar* ? *exiguus* (Conrad)

Meretrix hatchetigbeensis (Aldrich)

See *Pelecypora hatchetigbeensis* (Aldrich)

Meretrix lenis (Conrad)

See *Pitar lenis* (Conrad)

Meretrix lenticularis (Rogers and Rogers)

See *Dosiniopsis lenticularis* (Rogers and Rogers)

Meretrix liciata (Conrad)

See *Pitar* (*Pitar*) *ovatus* (Rogers and Rogers)

Meretrix macbeani Harris

See *Pitar* (*Lamelliconcha*) *macbeani* (Harris)

Meretrix mercenaroidea (Aldrich)

See *Mercimonia* ? *mercenaroidea* (Aldrich)

Meretrix minima (Lea)

See *Katherinella trigoniata* (Lea)

Meretrix mortoni (Conrad)

See *Callista* (*Costacallista*) *mortoni* (Conrad)

Meretrix mortoniopsis Harris *nomen nudum*

See *Pitar* (*Pitar*) *nuttalliopsis greggi* (Harris)

Meretrix neusensis Harris

See *Callista* (*Callista*) *neusensis* (Harris)

Meretrix nuttali (Conrad)

See *Pitar (Pitar) nuttali* (Conrad)

Meretrix nuttalliopsis (Heilprin)

See *Pitar (Pitar) nuttalliopsis* (Heilprin)

Meretrix nuttalliopsis var. (Heilprin), Harris, 1897a, (as *mortoniopsis*), p. 477

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

Meretrix nuttalliopsis fulva Harris

See *Pitar (Pitar) nuttalliopsis fulvus* (Harris)

Meretrix nuttalliopsis greggi Harris

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

Meretrix ovata (Rogers and Rogers)

See *Pitar (Pitar) ovatus* (Rogers and Rogers)

Meretrix ovata pyga (Conrad)

See *Pitar (Pitar) pyga* (Conrad)

Meretrix pearlensis Harris

See *Callista (Costacallista) pearlensis* (Harris)

Meretrix perovata (Conrad)

See *Callista (Callista) perovata* (Conrad)

Meretrix perovata aldrichi Harris

See *Callista (Costacallista) aldrichi* (Harris)

Meretrix perovata lisbonensis Harris

See *Callista (Callista) perovata lisbonensis* (Harris)

Meretrix perovata subvitrea (de Gregorio)

See *Callista (Callista) perovata subvitrea* (de Gregorio)

Meretrix poulsoni (Conrad)

See *Pitar poulsoni* (Conrad)

Meretrix profunda Conrad

The name is a *nomen nudum*, Conrad in Wailes, 1854, p. 289, (reprint 1939, p. 19)

Meretrix pyga (Conrad)

See *Pitar (Pitar) pyga* (Conrad)

Meretrix ripleyana (Gabb)

See *Pitar ? ripleyanus* (Gabb)

Meretrix subcrassus (Lea)

See *Rhabdopitaria subcrassa* (Lea)

Meretrix subimpressa (Conrad)

See *Macrocallista subimpressa* (Conrad)

Meretrix subimpressa (Conrad) var. Harris, 1897b

See *Macrocallista sylvaerupis* (Harris)

Meretrix sylvaerupis Harris

See *Macrocallista sylvaerupis* (Harris)

Meretrix texacola Harris, Harris, 1895a, p. 50 in part, pl. 2, figs. 5, 5a, not 5 b

See *Pitar* (*Calpitaria*) *texacola* (Harris)

Meretrix texacola Harris, Harris, 1895a, p. 50 in part, pl. 2, fig. 5b, not figs. 5, 5a; Harris, 1919, p. 142, in part, pl. 45, figs. 2, 3 only

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

Meretrix texacola Harris, Harris, 1895a, p. 50 in part, not pl. 2, figs. 5, 5a, 5b

See *Pitar* (*Calpitaria*) *petropolitanus* Stenzel and Krause

Meretrix texacola Harris, Harris, 1919, p. 142 in part, pl. 44, figs. 12, 12a

See *Pitar* sp.

Meretrix texacola? Harris, Harris, 1919, p. 142 in part, pl. 44, fig. 15

See *Pitar* sp.

Meretrix texacola Harris, Renick and Stenzel, 1931, p. 104 in part, loc. 1 only

See *Pitar* (*Calpitaria*) *petropolitanus* Stenzel and Krause

Meretrix texacola Harris, Renick and Stenzel, 1931, p. 104 (in part; loc. 2, 3, and 4; not loc. 1)

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

Meretrix texacola tornadonis Harris, Harris, 1919, p. 142 in part, pl. 45, figs. 2, 3 only

See *Pitar* (*Calpitaria*) *tornadonis* (Harris)

Meretrix trigoniata (Lea)

See *Katherinella trigoniata* (Lea)

Meretrix trigoniata bastropensis Harris

See *Katherinella* ? *trigoniata bastropensis* (Harris)

See also *Katherinella* ? sp.

See also *Pitar* ("Agriopoma") *amichel* Gardner

Meretrix trigoniata bastropensis Harris, Renick and Stenzel, 1931, p. 104 in part loc. 1

See *Sinodia* (*Sinodia*) *eocaenica* Stenzel and Krause

Meretrix trigoniata winnensis Harris

See *Rhabdopitaria winnensis* (Harris)

Meretrix? *vespertina* (Conrad)

See *Pitar* ? *vespertinus* (Conrad)

Meretrix Yoakumii Gabb

See *Pitar* (*Lamelliconcha*) *yoakumi* (Gabb)

Meretrix spp.

See *Pitar* spp.

"*Meretrix*" sp.

Veneridae

Meretrix sp., Harris, 1896, p. 68

Range.—Paleocene. Midway gr.

Localities.—ALA.: Wilcox Co., "beds 18 and 19"; Barbour Co., R.R. cut 1 $\frac{1}{3}$ mi. NE. of Clayton. TEXAS: Limestone Co. (Harris)

Type.—Unfigured specimens. Lost

Mesodesma singleyi (Harris)**Mesodesmatidae**

Ceronia singleyi Harris, Dumble, 1894, p. 553 *nomen nudum*; Harris, 1895a, p. 52, pl. 3, figs. 3, 3a; Dall, 1898b, p. 912; Dumble, 1915b, p. 453

Mesodesma singleyi (Harris), Gardner, 1945, p. 114, pl. 7, fig. 6 Mexican

Range.—Upper Eocene. Jackson gr. (type). (Gardner, 1945, not middle Eocene as in Harris)

Locality.—TEXAS: *Lee Co.*, Sunnyside Church (type)

Types.—Syntypes, No. 35668 BEG (fig. 3); No. 35669 BEG (fig. 3a)

Metis ? eutawensis Harris**Veneridae**

Metis ? eutawensis Harris in Van Winkle and Harris, 1919, p. 14, pl. 2, fig. 3; Brann and Kent, 1960, p. 551

Range.—Middle Eocene. Santee ls (type), upper Claiborne gr. *vide* Cooke and MacNeil, 1952, p. 20

Locality.—S. C.: *Orangeburg Co.*, Eutaw Springs (type)

Type.—Holotype, No. 1403 PRI

Microcallista subimpressa (Conrad)

See *Macrocallista subimpressa* (Conrad)

Micromeris minor (Lea)

See *Crassinella minor* (Lea)

Micromeris minutissima (Lea)**Astartidae**

Astarte minutissima Lea, 1833, p. 64, pl. 2, fig. 39; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 28

Pteromeris minutissima (Lea), Conrad, 1865a, p. 9

Micromeris minutissima (Lea), Conrad, 1866a, p. 5; Conrad, 1872a, pp. 51, 52; Tryon, 1884b, p. 229, pl. 120, fig. 25; Cossmann, 1893, p. 14; Harris, 1919, p. 95, pl. 32, figs. 24, 25; Brann and Kent, 1960, p. 555

Astarte (Micromeris) minutissima Lea, de Gregorio, 1890, p. 202, pl. 27, fig. 34 copy Lea

Crassatellites (Micromeris) minutissimus (Lea), Dall, 1903a, p. 1480

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5231 ANSP

Micromeris parva (Lea)

See *Cuna parva* (Lea)

Micromeris senex Meyer

See "*Venericardia*" sp.

Microstagon nana (Lea)**Ungulinidae**

Egeria nana Lea, 1833, p. 55, pl. 1, fig. 26; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 29

?*Egeria nana* Lea, Conrad, 1865a, p. 5; Conrad, 1866a, p. 7

Diplodonta ungulina (Conrad), de Gregorio, 1890, p. 208 in part, pl. 29, fig. 29 copy Lea

Goodallia nana (Lea), Cossmann, 1893, p. 14

Diplodonta nana (Lea), Dall, 1900, p. 1181 [in section *Felaniella*]; Harris, 1919, p. 128, pl. 40, figs. 15, 16; Brann and Kent, 1960, pp. 330, 331

Diplodonta (*Felaniella*) *nana* (Lea), Stenzel, Krause, and Twining, 1957, p. 118

Microstagon nana (Lea), Chavan, 1962, p. 8

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, probably No. 5142, ANSP

Miltha (*Plastomiltha*) *claibornensis* (Conrad)

See *Saxolucina* (*Plastomiltha*) *claibornensis* (Conrad)

Miltha claytonia (Harris)

See *Saxolucina claytonia* (Harris)

***Miltha ocalana* Dall**

Lucinidae

Phacoides (*Miltha*) *ocalanus* Dall, 1903a, p. 1375, pl. 50, fig. 14; Schuchert, et al., 1905, p. 497; Dall, 1916, pp. 488, 497

Miltha ocalana Dall, Harris, 1951, p. 21, pl. 10, figs. 7-9; Brann and Kent, 1960, p. 556

Range.—Upper Eocene. "Ocala ls." (type), Ocala gr.

Locality.—FLA.: Marion Co., Ocala (type)

Type.—Holotype, No. 112513 USNM

Miltha (*Eomiltha*) *pandata* (Conrad)

See *Eomiltha pandata* (Conrad)

Cf. *Miodontiscus aldrichianus* (Harris)

Carditidae

Astarte aldrichiana Harris, 1896, p. 62, pl. 5, figs. 6, 6a; Brann and Kent, 1960, p. 92

Range.—Paleocene. Naheola fm. (type), upper Midway gr.

Locality.—ALA.: Wilcox Co., Dale's Branch, near Oak Hill (type)

Type.—Holotype, (lost) PRI

Cf. *Miodontiscus timothii* Palmer and Brann, new name

Carditidae

Crassatellites clarkensis Aldrich, 1911, p. 3, pl. 1, fig. 3. Preoccupied by Dall, 1900, pl. 36, figs. 20, 21, 24, 25; Dall, 1903a, p. 1470

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Specimen, No. 639111 USNM "labeled as type is not certainly the figured specimen."

Cf. *Miodontiscus* sp.

Carditidae

Crassatellites (*Crassinella*) *aldrichianus* Harris sp., Aldrich, 1911, p. 3, pl. 1, figs. 1, 2

Range.—Lower Eocene. Bashi mem. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Wilcox Co., about 6 mi. E. of Thomasville

Type.—Figured specimen, No. 639109 USNM

Modiola alabamensis AldrichSee *Brachidontes alabamensis* (Aldrich)*Modiola cretacea* ConradSee *Modiolus cretaceus* (Conrad)*Modiola Ducateli* Conrad, Tuomey, 1858, p. 266Not *M. Ducatelli* Conrad, 1840, p. 53—Miocene*Modiola houstonia* HarrisSee *Mauricia houstonia* (Harris)*Modiola (Lithodomus?) inflata* WhitfieldSee *Modiolus subinflatus* (Whitfield)*Modiola Johnsoni* WhitfieldSee *Modiolus johnsoni* (Whitfield)*Modiola ovata* GabbSee *Modiolus ovatus* (Gabb)*Modiola potomacensis* ClarkSee *Brachidontes potomacensis* (Clark)*Modiola saffordi* GabbSee cf. *Brachidontes saffordi* (Gabb)*Modiola stubbsi* HarrisSee *Brachidontes stubbsi* (Harris)*Modiola tenuis* MeyerSee *Crenella ? tenuis* (Meyer)*Modiola texana* "Gabb", HarrisSee *Brachidontes texanus* (Harris)See also *Brachidontes* sp.

"Modiola texana (Gabb)" not Harris

See "*Perna*" *texana* Gabb*Modiola texana* HarrisSee *Brachidontes texanus* (Harris)**Modiolaria alabamensis** Meyer**Mytilidae**

Modiolaria alabamensis Meyer, 1886b, p. 83, pl. 3, fig. 19 *alabamiensis*; de Gregorio, 1890, p. 185, pl. 22, fig. 5 copy Meyer; Cossmann, 1893, p. 17 *alabamiensis*; Dall, 1898b, p. 806; Harris, 1919, p. 33, pl. 17, fig. 9 copy Meyer

Range.—Middle Eocene. "Lowest Claibornian" (type)

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638852 USNM

Modiolus (Brachydontes) alabamensis (Aldrich)See *Brachidontes alabamensis* (Aldrich)*Modiolus alabamensis* Clark and Martin, not AldrichSee *Brachidontes potomacensis* (Clark)

Modiolus cawcawensis Harris**Mytilidae**

Modiolus cawcawensis Harris, 1919, p. 31, pl. 17, figs. 3, 4; Brann and Kent, 1960, p. 564

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: *Orangeburg Co.*, Columbus Rd., 5 mi. N. of Orangeburg (type)

Types.—Syntypes, Nos. 477, 478 PRI

Modiolus cretaceus (Conrad)**Mytilidae**

Modiola cretacea Conrad, 1835b, p. 340, pl. 13, fig. 2; Aldrich, 1886, p. 43

Perna cretacea (Conrad), Conrad, 1865a, p. 10; Conrad, 1866a, p. 23; de Gregorio, 1890, p. 184

Modiolus cretaceus (Conrad), Dall, 1898b, p. 792 in part

Volsella (*Brachidontes* ?) *cretacea* (Conrad), Harris and Palmer, 1946, p. 44, pl. 10, figs. 10 copy Conrad, 11

Range.—Upper Eocene. Jackson gr. (zeuglodon horizon) (type)

Localities.—ALA.: *Clark[e] Co.* (type); "The Rocks;" *Choctaw Co.* (Aldrich), Fail P. O. (Dall)

Type.—Not found, Moore, 1962, p. 51

Modiolus filiosus (Conrad)

See *Arcoperna filiosa* Conrad

Modiolus houstonius Harris

See *Mauricia houstonia* (Harris)

Modiolus johnsoni (Whitfield)**Mytilidae**

Modiola Johnsoni Whitfield, 1885, p. 207, pl. 28, figs. 8, 9; Whitfield, 1899, p. 160; Weller, 1907, p. 509, pl. 55, figs. 14, 15 type

Range.—Lower Eocene. Manasquan fm. (type)

Locality.—N.J.: *Monmouth Co.*, Farmingdale (type)

Type.—Holotype, No. 9014/1AMNH

Modiolus marylandicus Clark and Martin**Mytilidae**

Modiolus marylandica Clark and Martin, 1901, p. 186, pl. 43, fig. 6

Range.—Lower Eocene. Nanjemoy fm. (type)

Locality.—VA.: *King George Co.*, Woodstock (type)

Type.—Holotype, USNM

Modiolus ovatus (Gabb)**Mytilidae**

Modiola ovata Gabb, 1860d, p. 396, pl. 68, fig. 31; Gabb, 1861, p. 199; Meek, 1864, p. 11; Whitfield, 1885, p. 197, pl. 26, figs. 13 type, 14;

Whitfield, 1899, p. 160; Weller, 1907, p. 508, pl. 55, figs. 16, 17

Modiolus ovatus (Gabb), Johnson, 1905, p. 12

Range.—Lower Eocene. Vincentown fm. (type)

Locality.—N. J.: boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

Type.—ANSP (Johnson, 1905)

Modiolus (*Brachidontes*) *potomacensis* (Clark)

See *Brachidontes potomacensis* (Clark)

Modiolus (Brachidontes) saffordi (Gabb)
See cf. *Brachidontes saffordi* (Gabb)

Modiolus (Brachydonates) stubbsi (Harris)
See *Brachidontes stubbsi* (Harris)

Modiolus subinflatus (Whitfield)

Mytilidae

Modiola (Lithodomus ?) inflata Whitfield, 1885, p. 197, pl. 26, fig. 1, 2.
Not *L. inflata* R., E. [E. Requier], 1848
Modiola subinflata Whitfield, 1899, p. 160 new name *M. inflata*;
Weller, 1907, p. 507, pl. 55, figs. 20, 21 type

Range.—Paleocene. Hornerstown fm. (type)

Locality.—N. J.: Gloucester Co., Mr. Ware's pit, near Mullica Hill (type)

Type.—Holotype, lost 1963

Cf. Modiolus subpontis (Harris)

Mytilidae

Modiola subpontis Harris, 1896, p. 49, pl. 3, figs. 6, 6a; Brann and Kent, 1960, p. 563

Modiolus subpontis (Harris), Dall, 1898b, p. 798

Range.—Paleocene. Uppermost Midway ls. as exposed at Ft. Gaines (type)

Locality.—GA.: Clay Co., Fort Gaines (type)

Types.—Syntypes, Nos. 55, 56 PRI

Modiolus texanus Gabb, Harris, 1919. Not Gabb, 1862c

See *Brachidontes texanus* (Harris)

See *Modiolus* sp.

Modiolus texanus Gabb, Trowbridge 1932, not Gabb, 1862c

See *Brachidontes* sp.

Modiolus (Brachidontes) texanus "Gabb" Dall, 1898b

See *Brachidontes texanus* (Harris)

See also "*Perna*" *texana* Gabb

Modiolus sp.

Mytilidae

Volsella sp. Richards in Richards and Palmer, 1953, p. 46, pl. 9, fig. 8

Range.—Upper Eocene. Inglis fm., lower Ocala gr.

Locality.—FLA.: Levy Co., L-93, road metal pit 2.9 mi. south of north limits of Gulf Hammock, just SW. of State Rd. 55 in SW. ¼ sec. 34, T. 14 S., R. 16 E.

Type.—Figured specimen, No. I-7560 Fla. Geol. Sur.

Modiolus (Brachidontes) sp.

Mytilidae

Modiolus (Brachydonates) sp., Barry, 1942+, p. 57, pl. 11, fig. 1

Range.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr.

Locality.—LA.: Natchitoches Par., cultivated field N. of farmhouse in NE. ¼, NW. ¼, sec. 34, T. 10 N., R. 10 W. on La. Highway 404 and 429, about 4½ mi. S. of Ajax

Type.—Figured specimen, No. 5011 LSU Pal. Mus.

Modiolus (Modiolus) sp.**Mytilidae**

Modiolus (Modiolus) sp. Barry, 1942+, p. 58, pl. 6, fig. 4

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

Locality.—LA.: *Sabine Par.*, S. bank La Nana Bayou about 100 yds. upstream from bridge on local road in center of sec. 12, T. 6 N., R. 13 W.

Type.—Figured specimen, No. 5121 LSU Pal. Mus.

Modiolus (Modiolus) sp.**Mytilidae**

Modiolus (Modiolus) sp. Barry, 1942+, p. 58, pl. 5, fig. 3

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.

Locality.—LA.: *Sabine Par.*, rd. cut along La. Highway 26, 2 ¼ mi. S. of Belmont on W. F. Skinner's farm. NW. ¼ sec. 16, T. 8 N., R. 11 W.

Type.—Figured specimen presumably LSU Pal. Mus.

Modiolus sp.**Mytilidae**

Modiolus texanus "Gabb", Harris, 1902, p. 7 as *Modiola*; Harris, 1919, p. 33 in part, pl. 17, fig. 8 not Georgetown as on expl. of pl. see text; Brann and Kent, 1960, p. 565 not Georgetown

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Localities.—GA: *Columbia Co.*, west of Grovetown near 16th mile-post on R.R. from Augusta (Harris, 1902); cf. *Burke Co.*, 3.7 mi. S. of Hephzibah (Harris, 1919)

Types.—Figured specimens, No. 479 PRI; cf. No. 7724 USNM

Montacuta bicuspidata Aldrich**Montacutidae**

Montacuta bicuspidata Aldrich, 1921, p. 20, pl. 2, figs. 29, 30

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 26 GSATC

Montacuta claiborniana Dall**Montacutidae**

Montacuta claiborniana Dall, 1899, p. 883 listed only; Dall, 1900, p. 1171, pl. 45, fig. 21; Schuchert, *et al.*, 1905, p. 416; Harris, 1919, p. 110, pl. 37, fig. 16 copy Dall

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 155768 USNM

Montacuta dalli Cossmann

See cf. *Mysella dalli* (Cossmann)

Montacuta eximia Aldrich nomen nudum

Museum label No. 76 GSATC, apparently description never published. (per. com. July 23, 1962)

Montacuta herberti Aldrich**Montacutidae**

Montacuta Herberti Aldrich, 1921, p. 21, pl. 3, figs. 6, 7

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Cave Branch (type)

Type.—Holotype, No. 27 GSATC

Musculus alabamensis (Aldrich)

See *Brachidontes alabamensis* (Aldrich)

Myoparo costatus Lea

See *Crenella margaritacea* (Conrad)

Myrtea ? curta (Conrad)**Lucinidae**

Cyclas curta Conrad, 1865a, p. 8 name only; Conrad, 1865b, p. 139;

Conrad, 1865d, p. 212, pl. 20, fig. 14; Stewart, 1930, p. 187 *Myrtea* ?

Lucina curta (Conrad), Conrad, 1866a, p. 24; not Shimer and Shrock, 1944, p. 423, pl. 168, figs. 26, 27 copy Clark and Martin, see *Lucina uhleri* Clark

Myrtaea curta (Conrad), Dall, 1903a, p. 1358 in part

Lucina (*Myrtea* ?) *curta* (Conrad), Harris and Palmer, 1946, p. 89, pl. 19, figs. 19-23; Brann and Kent, 1960, pp. 505, 506

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson; *Clarke Co.*, "Enterprise" = Garland Cr. (type) *vide* Aldrich, 1885c, p. 307. ARK.: *Cleveland Co.*, Vince Bluff, Saline R. TEXAS: *Sabine Co.*, Sabine R., Jackson beds (see Veatch, 1902, p. 131, pl. 33)

Type.—Probable holotype, No. 13223 ANSP, Moore, 1962, p. 51

Myrtea ? subcurta Harris**Lucinidae**

Lucina (*Myrtea* ?) *subcurta* Harris in Harris and Palmer, 1946, p. 89, pl. 20, figs. 1-5; Brann and Kent, 1960, p. 512

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Garland Cr.

Types.—Holotype, No. 4329; paratypes, Nos. 4330-4333 PRI

Cf. Mysella dalli (Cossmann)**Montacutidae**

Montacuta dalli Cossmann, 1893, p. 12, pl. 1, figs. 13, 14

Bornia Dalli (Cossmann), Dall, 1899, p. 883; Dall, 1900, p. 1149; Harris, 1919, p. 108, pl. 37, figs. 12, 12a copy Cossmann

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 11646 Lab. Géol., Sorbonne, Paris

Mysella minuta (Aldrich)**Montacutidae**

Rocheftortia minuta Aldrich, 1921, p. 20, pl. 2, figs. 27, 28

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 25 GSATC

Mysia astartaeformis ConradSee *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia deltoidea* ConradSee *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia inflata* (Lea)See *Diplodonta (Diplodonta) inflata* (Lea)*Mysia levis* (Conrad)See *Diplodonta (Diplodonta) inflata* (Lea)*Mysia nitens* (Lea)See *Abra (Abra) nitens* (Lea)*Mysia unguina* (Conrad)See *Diplodonta (Diplodonta) unguina* (Conrad)*Mysia ? unguina* (Conrad) Heilprin, 1891aSee *Katherinella trigoniata bastropensis* (Harris)*Mytilus hamatoides* CallSee *Hormomya hamatoides* (Call)**Nanohalus cossmanni** (Dall)**Noetiidae***Limopsis perplana* Cossmann, 1893, p. 16, pl. 1, figs. 20, 21 not *Pectunculus perplanus* Conrad, 1834, p. 134=*Limopsis perplanus* (Conrad), 1865a, p. 12*Limopsis Cossmanni* Dall, 1898b, p. 605 new name for *L. perplana* Cossmann, 1893*Trinacria cossmanni* (Dall), Harris, 1919, p. 45, pl. 20, figs 1, 2; Brann and Kent, 1960, p. 875*Halonanus (Trinacriella) cossmanni* (Dall), MacNeil, 1937, p. 456, fig. 1g*Nanohalus cossmanni* (Dall), Stenzel, Krause, and Twining, 1957, pp. 71, 72, pl. 6, figs. 15, 16, 21, 22*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 11504 Lab. Géol., Sorbonne, Paris*Navicula aspera* ConradSee *Barbatia (Acar) aspera* (Conrad)*Navicula cuculoides* ConradSee *Barbatia cuculoides* (Conrad)*Navicula lima* ConradSee *Barbatia cuculoides* (Conrad)*Neaera aequivalvis* WhitfieldSee *Cuspidaria aequivalvis* (Whitfield)*Neaera alternata* AldrichSee *Cuspidaria attenuata* (Aldrich)*Neaera (Cardiomya) multiornata* Meyer and AldrichSee *Cuspidaria multiornata* (Meyer and Aldrich)*Neaera prima* AldrichSee *Cuspidaria prima* (Aldrich)

Nemocardium actium (Gardner)**Cardiidae**

Protocardia [*Nemocardium*] *actia* Gardner, 1935, p. 181, pl. 16, fig. 11
Nemocardium actia (Gardner), Keen, 1950, p. 26 not lower Eocene;
 Hughes, 1961, p. 389 not lower Eocene

Range.—Paleocene. Wills Point fm. (type), upper Midway gr.

Locality.—TEXAS: *Bastrop Co.*, Colorado R., 2 mi. below the
 Travis-Bastrop Co. line (type)

Type.—Holotype, No. 370917 USNM

Nemocardium curtum (Conrad)**Cardiidae**

Protocardia curta Conrad, 1868, p. 731 *nomen nudum*; Conrad, 1869b,
 p. 42, pl. 1, fig. 1; not Meek, 1868, p. 731 as in Whitfield, 1885, p.
 236; not *Cardium curtum* Meek and Hayden, 1862, p. 442

Protocardia curtum Conrad, Whitfield, 1885, p. 236, pl. 30, figs. 5-7

Nemocardium curtum (Conrad), Keen, 1950, p. 27; Hughes, 1961, p.
 389

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N. J.: *Monmouth Co.*, Shark R. (type); Squankum;
 Farmingdale

Type.—Missing ANSP, Moore, 1962, p. 52

Nemocardium gambrinum (Gabb)Pl. 1, figs. 6, 10 **Cardiidae**

? *Protocardia diversa* Conrad, Gabb, 1862c, p. 370

Protocardia gambrina Gabb, 1862d, p. 371; Conrad, 1865a, p. 7; Con-
 rad, 1866a, p. 6 not "Cal."; Harris, 1919, p. 133 in part, pl. 42, fig.
 2, ? 3

Nemocardium gambrina (Gabb), Keen, 1950, p. 27 not Paleocene;
 Hughes, 1961, p. 389 not Paleocene

Protocardia gambrina harrisi Dall, Brann and Kent, 1960, p. 738 in
 part No. 1144 only

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R.;
Houston Co. (type), Alabama Bluff, Trinity R.; K. Jones' well,
 Hodge headright; Alum Bluff, Trinity R. LA.: *Bienville Par.*
 Hammett's Branch. ALA.: *Monroe Co.*, Lisbon Bluff ?, Alabama
 R.

Type.—Holotype, ANSP

Nemocardium harrisi (Dall)**Cardiidae**

Cardium Nicoleti Tuomey, 1858, pp. 264, 271 Bells Ldg.

Protocardia Nicolleti Conrad var. Aldrich, 1886, pp. 57, 59 *Cardium*
Nicolleti var.

Protocardia virginiana ? Conrad, Harris, 1897a, p. 475, pl. 20, figs. 7,
 8; not *P. virginiana* Conrad, 1864, p. 211

Protocardia lenis Conrad var. Harris, 1897b, p. 58, in part, pl. 12, fig. 1

Protocardia harrisi Dall, 1900, p. 1113=*P. virginiana* ? Harris, 1897a
 not Conrad; Harris, 1919, p. 133 in part, pl. 42, fig. 6, not fig. 3;
 Harris and Palmer, 1946, p. 93, pl. 20, fig. 22 (*Nemocardium*);
 Brann and Kent, 1960, p. 738 also as *Protocardia gambrina harrisi*
 Dall, not No. 1144 (=upper Claiborne)

Range.—Lower Eocene. Tusahoma fm., middle Wilcox [Sabine]
 gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sa-
 bine] gr.

Localities.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type); *Monroe Co.*, Greggs Ldg., Alabama R.; Bells Ldg., Alabama R.; *Dale Co.*, Ozark
Type.—Holotype, No. 6276 ANSP

Nemocardium lene (Conrad)**Cardiidae**

Cardium (Protocardia) lene Conrad, 1856a, p. 258 (reprint 1939, p. 4)
Protocardia virginiana Conrad, 1864, p. 211; Conrad, 1866a, p. 6;
 Clark, 1895, p. 5; Clark, 1896, p. 81, pl. 26, figs. 1a-c; Harris, 1896,
 p. 65. Not *P. virginiana* (Conrad), Harris, 1897a, p. 475, pl. 20, figs.
 7, 8

Protocardia lenis (Conrad), Dall, 1900, p. 1113; Clark and Martin,
 1901, p. 172, pl. 36, figs. 2, 2a, 3 not figs. 1, 1a

Cardium line [sic] Conrad, Shimer and Shrock, 1944, p. 425

Nemocardium lene (Conrad), Keen, 1950, p. 27; Hughes, 1961, p. 389.

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: *Charles Co.*, Popes Cr. VA.: [Hanover ?] Co.,
 Pamunkey R. (type); *King George Co.*, Woodstock

Type.—Missing Moore, 1962, p. 69; type *Protocardia virginiana*
 Conrad missing Moore, 1962, p. 108

Nemocardium nicolletti (Conrad)**Cardiidae**

Cardium Nicolletti Conrad, 1841, p. 33; Conrad, 1842a, p. 190; Conrad,
 1846a, p. 22, pl. 1, fig. 14; H. C. Lea, 1849, p. 97 as *Nicoletti*; Conrad
 in Wailes, 1854, p. 289, pl. 14, fig. 6 (reprint 1939, p. 19, pl. 1, fig.
 6); Conrad, 1856a, p. 258 in part (reprint, 1939, p. 4 in part); Tuo-
 mey, 1858, p. 264, not p. 271 as *Nicoletti* (Bells Ldg., Ala.); Hilgard
 in Hopkins, 1871, p. 11; Heilprin, 1884b, p. 87; Meyer, 1885a, p. 467;
 Cossmann, 1893, p. 11 *Nemocardium* s.g.

Protocardia Nicoleti [sic] (Conrad), Conrad, 1865a, p. 7; Conrad,
 1866a, p. 24

Protocardia lima Conrad, 1865a, p. 7 name only; Conrad, 1865b, p. 139,
 pl. 10, fig. 3; Conrad, 1866a, p. 24

Cardium (Protocardium [sic]) Nicolletti Conrad, de Gregorio, 1890,
 p. 216 in part

Protocardia nicolletti (Conrad), Gabb, 1862c, p. 370; Dall, 1900, p.
 1113 as *Nicoletti*; Harris, 1897b, p. 59; Harris, 1919 (no page), pl.
 42, fig. 4; Brann and Kent, 1960, p. 739

Nemocardium nicolletti (Conrad), Stewart, 1930, pp. 275, 276; Keen,
 1950, p. 27 not middle Eocene; not Hughes, 1961, p. 389, pl. 54, figs.
 1-10, text fig. new species

Protocardia (Nemocardium) nicolletti (Conrad), Harris and Palmer,
 1946, p. 92, pl. 20, figs. 16-19; Brann and Kent, 1960, p. 739

Cf. *Cardium nicolletti* Conrad, Harris, 1951, p. 23, pl. 12, figs. 1, 2
 as *Protocardia*; Brann and Kent, 1960, p. 739 as *Protocardia*.

The original description stated that the specimen came from the Ouachita R., La., area [Jackson Eocene], therefore, a type should be designated from that locality. The original specimen is lost, but the species occurs at Bunker Hill, Gibson Ldg., Danville Ldg. on the Ouachita R. A neotype should and can be designated from one of those localities preferably from the locality lowest in the section to meet the requirements of near "Monroe". The shell which Conrad figured and which has been labelled type in the ANSP was from Jackson, Miss. (Wailes, 1854). That specimen, No. 13190, a double-valved shell, has been indicated as "possible syntype". It cannot meet the requirements for neotype designation (see Int. Code Zool. Nomen., 1961, art. 75, p. 81). A neotype should be designated from the Ouachita R.

Range.—Upper Eocene. Moodys Branch fm. (type) lower Jackson gr.

Localities.—LA.: "Monroe Co.", "Washita R." Conrad, = Ouachita R. near Monroe ("type") Conrad, 1856a, p. 257; *Caldwell Par.*, Bunker Hill, Ouachita R.; above Gibson Ldg. Ouachita R.; *Catahoula Par.*, Danville Ldg., Ouachita R. MISS.: *Clarke Co.*, Garland Cr.; *Hinds Co.*, Jackson. Cf. Harris, 1951

Type.—Holotype, lost. Specimens, No. 13190 ANSP not syntypes as in Moore, 1962, p. 80

Nemocardium quihi (Gardner)

Cardiidae

Protocardia quihi Gardner, 1935, p. 180, pl. 16, figs. 9, 10

Nemocardium quihi (Gardner), Keen, 1950, p. 28 not "Lower Eocene"; Hughes, 1961, p. 389, not lower Eocene

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Medina Co.*, 5.7 mi. NW. of Castroville on the Quihi rd. (type); $2\frac{1}{4}$ mi. N. 20° E. from Dunlay; bed of Hondo Cr., loose boulder $\frac{1}{8}$ mi. below rd. crossing due E. of Elstone

Type.—Holotype, No. 370916 USNM

Nemocardium salrivale (Harris)

Cardiidae

Protocardia salrivalis Harris, 1919, p. 134, pl. 42, figs. 7-9; Brann and Kent, 1960, p. 739

Nemocardium salrivalis (Harris), Keen, 1950, p. 28; Hughes, 1961, p. 389

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: *Winn Par.*, St. Maurice at mouth of Saline Bayou (syntypes); possibly *Sabine Par.*, Bayou Negreet

Types.—Syntypes, No. 1148, 1149 [unnumbered lost] PRI

Nemocardium, n. sp.

Cardiidae

Protocardia nicolletti var. Harris, 1896, p. 65, pl. 6, fig. 2 not of Conrad, 1841; Brann and Kent, 1960, p. 739

Nemocardium nicolletti (Conrad), Hughes, 1961, p. 389, pl. 54, figs. 1-10 not of Conrad

Range.—Paleocene. Midway gr.

Localities.—ALA.: See Harris, 1896, p. 66 for Ala. localities. MISS.: See Hughes, 1961, pp. 389, 390

Types.—Figured specimens, No. 66 PRI; Nos. 563624, 129891 USNM

Nemocardium sp.

Cardiidae

Cardium Nicolleti Conrad var., Aldrich, 1886, p. 48

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

Type.—Unfigured specimen unknown

Nemocardium sp.

Cardiidae

Protocardia lenis (Conrad), Clark and Martin, 1901, p. 172 in part, pl. 36, figs. 1, 1a not figs. 2, 2a, 3

Range.—Paleocene. Aquia fm.

Localities.—MD.: Charles Co., 1 mi. SE. of Mason Springs; Prince Georges Co., Upper Marlboro; 1 mi. NE. of Piscataway; Queen Annes Co., Rolphs Ldg., Chester R. VA.: Stafford Co., Aquia Cr.; Potomac Cr. King George Co., 2 mi. below Potomac Cr.; mouth of Paspotansa Cr.

Type.—Figured specimen USNM

Nemocardium sp.

Cardiidae

Protocardia sp. Gardner, 1935, p. 180

Range.—Paleocene. Wills Point fm. "red beds", upper Midway gr.

Locality.—TEXAS: southern Maverick Co.

Type.—Unfigured specimen not found USNM, 1962

Nemocardium ? sp.

Cardiidae

Protocardia ? sp. Gardner, 1935, p. 182

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Caldwell Co., 5 ½ mi. N. of Lockhart

Type.—Unfigured specimen not found USNM, 1962

Nemocardium sp.

Cardiidae

Protocardia sp. Harris, 1919, no page, pl. 42, fig. 10; Brann and Kent, 1960, p. 739

Range.—Middle Eocene. Claiborne gr.

Locality.—VA.: Caroline Co., Port Royal, Rappahannock R.

Type.—Figured specimen, No. 1150 PRI

Nodipecten anatis (Morton)

See *Flexopecten anatis* (Morton)

Nodipecten pulchricosta (Meyer and Aldrich)

See *Chlamys pulchricosta* (Meyer and Aldrich)

Noetia pulchra Gabb

See *Pachecoia (Pachecoia) pulchra* (Gabb)

Notocorbula texana (Gabb)

Corbulidae

Corbula texana Gabb, 1860d, p. 387, pl. 67, fig. 54; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; not Heilprin, 1886, p. 57; not Heilprin, 1891a, p. 401; Kennedy, 1895, pp. 123, 128, not p. 113; Vaughan, 1896, p. 47 (questionable *fide* Stenzel, Krause, and Twining); Harris, 1919, p. 190, pl. 57, figs. 24-28; Deussen, 1924, p. 67; Renick and Stenzel, 1931, p. 103 in part, loc. 1, 2, and 3 only; Brann and Kent, 1960, p. 273

Corbula (Aloides) texana Gabb, Dall, 1898b, p. 845

"*Corbula*" *texana* Gabb, Vokes, 1944, p. 621 probably *Caestocorbula Corbula (Varicorbula) texana* Gabb, Gardner, 1945, p. 127; not pl. 9, figs. 1, 5

Notocorbula texana (Gabb), Stenzel, Krause, and Twining, 1957, p. 170, pl. 21, figs. 1-10

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Localities.—TEXAS: Burtleson Co., Stone City Bluff, Brazos R. presumably (*fide* Stenzel, Krause, and Twining); Angelina Co., see Stenzel, Krause, and Twining

Types.—Figured syntype, lost *fide* Harris, 1919, p. 190; Stenzel, *et al.*, 1957, p. 172; unfigured syntypes, No. 13262 ANSP mixed

Nucula aequalis ConradSee *Calorhadia equalis* (Conrad)*Nucula austinclarki* MacNeilSee *Nucula (Lamellinucula) monroensis* Aldrich*Nucula bella* ConradSee *Calorhadia bella* (Conrad)*Nucula Brogniarti* [sic] Lea (*brongniarti*)See *Nuculana coelata* (Conrad)*Nucula caelata* ConradSee *Nuculana coelata* (Conrad)*Nucula calcarensis* ConradSee *Nuculana calcarensis* (Conrad)**"Nucula capsioipsis" de Gregorio****Nuculidae**

Nucula capsioipsis de Gregorio, 1890, p. 187, pl. 22, figs. 23, 24; Harris, 1919, p. 71, pl. 25, figs. 22, 23 copies De Gregorio; Schenck, 1934, p. 49

Localities and species not definite.

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr. (type, presumably)

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type, presumably)

Type.—Lost prior to 1962, De Gregorio Coll., Univ. of Palermo, Palermo, Sicily

Nucula carinifera LeaSee *Trinacria cuneus* (Conrad)*Nucula carolinensis* ConradSee *Nuculana carolinensis* (Conrad)***Nucula circe* Whitfield****Nuculidae**

Nucula circe Whitfield, 1885, p. 227, pl. 29, fig. 12; Whitfield, 1899, p. 161; Schenck, 1934, p. 49

Only specimen distorted.

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N. J.: *Monmouth Co.*, Shark R. (type)

Type.—AMNH (Whitfield, 1899, p. 161) lost AMNH *vide* Newell, 1962

Nucula claibornensis ConradSee *Orthoyoldia claibornensis* (Conrad)*Nucula coelata* ConradSee *Nuculana coelata* (Conrad)*Nucula cultelliformis* (Rogers and Rogers)See *Nuculana cultelliformis* (Rogers and Rogers)*Nucula eborea* Conrad, 1846=*Leda concentrica* Say, 1824See *Jupiteria smirna* (Dall) for details*Nucula equalis* ConradSee *Calorhadia equalis* (Conrad)

Nucula improcera ConradSee *Nuculana improcera* (Conrad)*Nucula magna* LeaSee *Nuculana magna* (Lea)***Nucula (Nucula) magnifica* Conrad****Nuculidae**

Nucula magnifica Conrad, 1833b, p. 37 not figured as indicated in Conrad (Harris reprint 1893, p. 59); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; Tuomey, 1858, pp. 266, 274; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Aldrich, 1885c, p. 302; Aldrich, 1886, pp. 9, 44, 48; not Langdon, 1886, p. 205; Smith and Johnson, 1887, p. 29; de Gregorio, 1890, p. 186, pl. 22, figs. 16-18, fig. 19 copy *N. Sedgewickii* Lea; Cossmann, 1893, p. 14; not Harris, 1894b, p. 146; Harris, 1895b, p. 26; Harris, 1897b, p. 50 stated not in Wilcox Eocene; Harris, 1919, p. 73, pl. 26, figs. 1-3, 8; Schenck, 1934, p. 51; Harris and Palmer, 1946, p. 62 in part, pl. 14, fig. 17; Van de Poel, 1955, p. 9; Brann and Kent, 1960, p. 603

Nucula Sedgewickii Lea, 1833, p. 79, pl. 3, fig. 58; Conrad, App. in Morton, 1834, p. 7=*N. magnifica* Conrad; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 41; Schenck, 1934, p. 53 (= *sedgewickii*)

Not *Nucula magnifica* Aldrich, 1886, pp. 58-60; not Clark, 1895, p. 5; not Clark, 1896, p. 82=*N. potomacensis* Clark and Martin

Nucula (Nucula) magnifica Conrad, Stenzel, Krause, and Twining, 1957, p. 46

Nuculana magnifica (Conrad), Brann and Kent, 1960, p. 607 error for *Nucula*

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (2), No. 30508 ANSP Moore, 1962, p. 73

Nucula (Nucula) magnifica* Conrad "var."*Nuculidae**

Nucula magnifica Conrad var., Harris, 1919, p. 74, pl. 26, fig. 7; Brann and Kent, 1960, p. 603

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: Bienville Par., Hammetts Branch, SW. $\frac{1}{4}$ sec. 30, T. 18 N., R. 6 W., about 2 mi. NE. Mt. Lebanon

Type.—Figured specimen, No. 623 PRI

Nucula (Nucula) magnifica* Conrad "var."*Nuculidae**

Nucula magnifica Conrad "var.", Harris and Palmer, 1946, p. 62 in part, pl. 14, fig. 18

Nuculana magnifica (Conrad) "var.", Brann and Kent, 1960, p. 607 error for *Nucula*

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R.

Type.—Figured specimen, No. 4244 PRI

Nucula (Nucula) magnifica* Conrad "var."*Nuculidae**

Nucula ovula Dall in Call, 1891, p. 8 footnote not *N. ovula* Lea, 1833, p. 80

Nucula magnifica Conrad, Harris, 1894b, pp. 92, 115, 146

Nucula magnifica Conrad var., Harris and Palmer, 1946, p. 62 in part

Range.—Upper Eocene. White Bluff fm., lower Jackson gr.

Localities.—ARK.: Jefferson Co., White Bluff, Arkansas R.; Drew Co., Long Prairie; Wadsworth's well, 14 S., 6 W., sec. 5

Type.—Specimen unknown

Nucula magnifica Aldrich not Conrad, 1833b

See *Nucula* (*Nucula*) *mediavia* Harris

Nucula magnifica Clark, 1896 not Conrad, 1833b

See *Nucula* (*Nucula*) *potomacensis* Clark and Martin

Nucula magnifica Harris, 1894b not Conrad, 1833b

See *Nucula* (*Nucula*) *magnifica* Conrad "var."

Nucula magnifica var. *mauricensis* Harris

See *Nucula* (*Nucula*) *mauricensis* Harris

***Nucula* (*Nucula*) *magnifica yazooensis* Harris**

Nuculidae

Nucula magnifica var. *yazooensis* Harris, Harris and Palmer, 1946, p. 62, pl. 14, figs. 19, 20

Nucula (*Nucula*) *spheniopsis yazooensis* Harris, Stenzel, Krause, and Twining, 1957, p. 46 variant of *N. spheniopsis*

Nuculana magnifica yazooensis (Harris), Brann and Kent, 1960, pp. 607, 608 error for *Nucula*

Range.—Upper Eocene. Upper Jackson gr. (type)

Locality.—MISS.: Yazoo Co., Sims Siding, 8 mi. N. of Yazoo City (type)

Types.—Syntypes, Nos. 4245, 4246 PRI

***Nucula* (*Nucula*) *mauricensis* Harris**

Nuculidae

Nucula magnifica mauricensis Harris, 1919, p. 74, pl. 26, figs. 4-6; Price and Palmer, 1928, p. 24, pl. 7, figs. 6, 8; Renick and Stenzel, 1931, pp. 105, 108; Harris and Palmer, 1946, p. 62, pl. 14, fig. 21 same as Harris, 1919, pl. 26, fig. 5 designated by Harris as holotype but later than Gardner lectotype, 1945; Brann and Kent, 1960, pp. 603, 604

Nucula mauricensis Harris, Deussen, 1924, p. 67; Schenck, 1934, p. 51; Gardner, 1945, p. 41 lectotype designated

Nucula (*Nucula*) *mauricensis* Harris, Stenzel, Krause, and Twining, 1957, p. 43, pl. 4, figs. 1-4

Range.—Middle Eocene. Queen City fm., lower Claiborne gr.; Weches fm., middle Claiborne gr.; Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS: Lee Co., Orell's Crossing, Elm Cr., (probably Bur. Ec. Geol. loc. No. 144-T-5); Bastrop Co., mouth of Gazley Cr., Colorado R., Smithville

Types.—Lectotype designated by Gardner, 1945, Bur. Ec. Geol., Univ. of Texas, not found by Stenzel, 1957. Paralectotypes, Nos. 620, 621 PRI

Nucula media Lea

See *Calorhadia equalis* (Conrad)

Nucula (Nucula) mediavia Harris**Nuculidae**

Nucula magnifica Aldrich, 1886, p. 60 not Conrad, 1833b, p. 37

Nucula mediavia Harris, 1896, p. 53, pl. 4, fig. 4; Dall, 1898b, p. 577; Schenck, 1934, p. 51; Gardner, 1935, p. 116; Brann and Kent, 1960, p. 604

Nucula sp. aff. *N. mediavia* Harris, Gardner, 1945, p. 41 Mexico

Nucula (Nucula) mediavia Harris, Stenzel, Krause, and Twining, 1957, p. 45

Range.—Paleocene. Kincaid fm., lower Midway gr.; Clayton fm. (type), lower Midway gr.; Porters Cr. fm., upper Midway gr.

Localities.—ALA.: *Wilcox Co.*, Midway, "W. side of Alabama R., 5 mi. below Prairie Bluff" (type) *vide* Harris, 1896, p. 12. Station 4 on specimen; old locality, description see Harris, 1896, p. 12; *Sumter Co.*, Black Bluff, Tombigbee R; *Wilcox Co.*, $\frac{1}{2}$ mi. W. of Graveyard Hill; 1 mi. N. of Allenton; Station No. 264 [USNM], *Prairie Cr. TEXAS: Bastrop Co.*, USGS Stations 11915 ? and 12112, Colorado R., 1 $\frac{1}{2}$ mi. below the Travis-Bastrop Co. line (Gardner)

Type.—Holotype, No. 34 PRI

Nucula (Nucula) meridionalis Meyer and Aldrich

See *Nucula (Nucula) spheniopsis* Conrad

Nucula (Lamellinucula) monroensis Aldrich**Nuculidae**

Nucula Monroensis Aldrich, 1886, p. 40, pl. 4, fig. 2; de Gregorio, 1890, p. 187, pl. 22, fig. 25, fig. 26 copy Aldrich; Dall, 1898b, p. 577; Harris, 1919, p. 75, pl. 26, fig. 11 copy Aldrich; Schenck, 1934, p. 52

Nuculana monroensis (Aldrich), Cossmann, 1893, p. 14

Nucula austinclarki MacNeil, 1951, p. 13, figs. 1, 2

Nucula (Lamellinucula) monroensis Aldrich, Stenzel, Krause, and Twining, 1957, p. 45 with *N. austinclarki* MacNeil equivalent

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); *Clarke Co.*, gully in W. center of sec. 10, T. 9 N., R. 4 E. (type of *N. austinclarki* MacNeil)

Types.—Syntypes, Nos. 638803, 638804 USNM. Holotype, *N. austinclarki* MacNeil, No. 560585 USNM

Nucula mucronata Conrad

See *Nuculana vanuxemi* (Dall)

See also *Calorhadia semen* (Lea)

Nucula opulenta Conrad

See *Calorhadia (Calorhadia) opulenta* (Conrad)

Nucula ovula Aldrich, 1886, p. 49 not Lea, 1833

See *Nucula* sp.

Nucula ovula Dall in Call, 1889, not Lea, 1833

See *Nucula magnifica* Conrad "var."

Nucula ovula Harris, 1896 and Harris, 1897b, not Lea, 1833

See *Nucula* spp.

Nucula (Nucula) ovula Lea**Nuculidae**

Nucula ovula Lea, 1833, p. 80, pl. 3, fig. 59; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102; not Aldrich, 1886, pp. 49, 53, 58; de Gregorio, 1890, p. 186, pl. 22, fig. 20 copy Lea; Cossmann, 1893, p. 14; Harris, 1895b, p. 31; Harris, 1896, p. 54 in part (not pl. 4, fig. 5—Midway); not Harris, 1897b, p. 50, pl. 8, fig. 7; Dall, 1898b, p. 577 in part; Clark and Martin, 1901, p. 202 in part, not pl. 57, fig. 6; Harris, 1919, p. 75, pl. 26, figs. 12-14; Schenck, 1934, p. 52; Shimer and Shrock, 1944, p. 375, pl. 145, fig. 36 copy Clark and Martin; Harris and Palmer, 1946, p. 63, pl. 14, figs. 23, 31; Van de Poel, 1955, p. 9; Brann and Kent, 1960, pp. 604, 605 not Nos. 36, 148

Nuculana ovula (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Nucula [sic] *ovula* Lea, Barry, 1942+, p. 44, pl. 2, figs. 6, 7

Nucula (*Nucula*) *ovula* Lea, Stenzel, Krause, and Twining, 1957, p. 46

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5399 ANSP

Nucula parilis Conrad

See *Nuculana parilis* (Conrad)

Nucula parva Rogers and Rogers

See *Saccella parva* (Rogers and Rogers)

Nucula pectuncularis Lea

See *Pachecoa* ? (*Pachecoa* ?) *pectuncularis* (Lea)

Nucula plana Lea

See *Nuculana plana* (Lea)

Nucula plicata Lea

See *Calorhadia bella* (Conrad)

Nucula (Nucula) potomacensis Clark and Martin**Nuculidae**

Nucula magnifica Clark, 1895, p. 5; Clark, 1896, p. 82; not *Nucula magnifica* Conrad, 1833b

Nucula potomacensis Clark and Martin, 1901, p. 202, pl. 57, figs. 7, 7a, 8, 8a; Schenck, 1934, p. 53

Nucula (*Nucula*) *potomacensis* Clark and Martin, Stenzel, Krause, and Twining, 1957, p. 46

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: King George Co., Woodstock (type); Hanover [?] Co., Hanoversville. MD.: Charles Co., head of Nanjemoy Cr.; Popes Cr.; E. and W. of Port Tobacco; 2½ mi. above Popes Cr.; Prince Georges Co., Charles Br. between Rosaryville and Upper Marlboro; Upper Marlboro (deep cut near Chesapeake Beach R.R. station)

Types.—Syntypes, USNM

Nucula pulcherrima Lea

See *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)

See also *Nuculana plana* (Lea)

Nucula (Pectinucula ?) ripae Harris**Nuculidae**

Nucula ripae Harris, 1919, p. 74, pl. 26, figs. 9, 10; Schenck, 1934, p. 53; Brann and Kent, 1960, pp. 605, 606

Nucula (Pectinucula ?) ripae Harris, Stenzel, Krause, and Twining, 1957, p. 45

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type). S.C.: *Orangeburg Co.*, 3 mi. WNW. of Orangeburg

Types.—Syntypes, Nos. 624, 625 PRI

***Nucula secunda* (Whitfield)**

Nuculidae

Nucularia secunda Whitfield, 1885, p. 229, pl. 29, figs. 13, 14; Whitfield, 1899, p. 161

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, No. 7838, State Mus., Trenton, N.J.

Nucula Sedgewickii Lea

See *Nucula (Nucula) magnifica* Conrad

Nucula semen Lea

See *Calorhadia semen* (Lea)

***Nucula (Nucula) smithvillensis* Stenzel and Twining**

Nuculidae

Nucula (Nucula) smithvillensis Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 44, pl. 4, figs. 5-7

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

Types.—Holotype, No. 20763 BEG (figs. 6, 7); paratypes, No. 20764 BEG (fig. 5), No. 20765 BEG unfigured paratypes

***Nucula (Nucula) spheniopsis* Conrad**

Nuculidae

Nucula spheniopsis Conrad, 1865b, p. 140, pl. 10, fig. 13; Schenck, 1934, p. 54; Gardner, 1945, p. 42 in part; Harris and Palmer, 1946, p. 63, pl. 14, figs. 24-30 (29, 30 "vars."); Stenzel, Krause, and Twining, 1957, p. 46; Brann and Kent, 1960, p. 607

Nucula meridionalis Meyer and Aldrich in Meyer, 1887a, p. 10, pl. 2, fig. 2; Cossmann, 1893, p. 14; Schenck, 1934, p. 52; Harris and Palmer, 1946, pp. 63, 64 [under *spheniopsis*], pl. 14, fig. 28 copy Meyer and Aldrich; Stenzel, Krause, and Twining, 1957, p. 46

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Clarke Co.*, Enterprise=Garland Cr. (type) (Aldrich, 1885c, p. 307); *Hinds Co.*, Jackson

Types.—Missing ANSP Moore, 1962, p. 97. Holotype, *Nucula meridionalis* Meyer and Aldrich, No. 638881 USNM

Nucula (Nucula) spheniopsis yazooensis Harris

See *Nucula magnifica yazooensis* Harris

Nucula subtrigona Conrad

See *Nuculana subtrigona* (Conrad)

***Nucula* sp.**

Nuculidae

Nucula ovula Lea, Aldrich, 1886, p. 49. Not Lea, 1833, p. 80

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.

Type.—Unfigured specimen, USNM

Nucula sp.

Nuculidae

Nucula ovula Harris, 1896, p. 54 in part, pl. 4, fig. 5. Brann and Kent, 1960, p. 604. Not *N. ovula* Lea, 1833, p. 80

Range.—Paleocene. Naheola fm., upper Midway gr.

Localities.—ALA.: Wilcox Co., Dale's Branch; Oak Hill

Type.—Figured specimen, No. 36 PRI

Nucula sp.

Nuculidae

Nucula ovula Harris, 1897b, p. 50, pl. 8, fig. 7; Brann and Kent, 1960, p. 604. Not *N. ovula* Lea, 1833, p. 80

Cf. *Nucula ovula* Lea "var." Aldrich, 1886, p. 53

Range.—Lower Eocene. Bashi mem., Hatchitigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.; Choctaw Corners

Type.—Figured specimen, No. 148 PRI

Nucula sp.

Nuculidae

Nucula sp. Gardner, 1923, p. 109, pl. 29, fig. 3

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: Webb Co., 1 mi. E. of Laredo; 5 mi. SE. of Laredo

Type.—Figured specimen, No. 352266 USNM

Nucula spp.

Nuculidae

Nucula spp. Gardner, 1935, pp. 116, 117

Range.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

Localities.—TEXAS: Freestone Co., Butler Dome; Cribbs Bluff, Brazos R.; Medina and Maverick Cos.; Brazos Co., Colorado R.

Type.—Unknown

Nucula sp.

Nuculidae

Nucula sp. Harris, 1919 [no p.] pl. 26, fig. 15 no description; Brann and Kent, 1960, p. 606

Range.—Middle Eocene. Claiborne gr.

Locality.—MISS.

Type.—Figured specimen No. 629 PRI

Nuculana aequalis (Conrad)

See *Calorhadia equalis* (Conrad)

Nuculana albaria (Conrad)

Nuculanidae

Yoldia protexta Conrad, 1865e, p. 213, pl. 21, fig. 2; Conrad, 1866a, p. 4; Conrad in Cook, 1868, p. 731 not "Meek, 1868, p. 731" as in Whitfield, 1885, p. 228. Not *Leda protexta* Gabb, 1860a, p. 303=*Nuculana protexta* (Gabb) Cretaceous.

Yoldia albaria Conrad, 1867a, p. 8 new name for *Yoldia protexta* Conrad, 1865e, p. 213

Nuculana albaria (Conrad), Whitfield, 1885, p. 228 in part, not pl. 29, figs. 15, 16

Leda albaria (Conrad), Dall, 1898b, p. 586

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N.J.: Monmouth Co., Shark R. (type); Farmingdale; Squankum

Type.—Missing Moore, 1962, p. 90 not Amer. Jour. Conch. vol. 1, p. 147, pl. 11, fig. 6 as in Moore. Error for *ibid.* p. 213, pl. 21, fig. 2 see above.

Nuculana albirupina (Harris)

See *Calorhadia* (*Litorhadia* ?) *albirupina* (Harris)

Nuculana aldrichiana var. *sabinetownensis* Barry

See *Calorhadia* (*Litorhadia*) *aldrichiana sabinetownensis* (Barry)

Nuculana bella (Conrad)

See *Calorhadia bella* (Conrad)

***Nuculana* "bella" (Conrad) var."**

Nuculanidae

"*Leda bella* Conrad var." Conrad, 1860, p. 295

Species not known.

Range.—Paleocene. Midway gr.

Locality.—ALA.: Wilcox Co. "Showalter Collection" Matthews
Ldg. *fide* Aldrich,

Type.—Unknown

Nuculana Brongniarti (Lea)

See *Nuculana coelata* (Conrad)

Nuculana caelata (Conrad)

See *Nuculana coelata* (Conrad)

***Nuculana calcarensis* (Conrad)**

Nuculanidae

Nucula calcarensis Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 5; H. C. Lea, 1849, p. 102 *calcarensis*

Leda calcarensis (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 70, pl. 25, fig. 19 (type)

Nuculana calcarensis (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing, ANSP Moore, 1962, p. 44

***Nuculana carolinensis* (Conrad)**

Nuculanidae

Nucula carolinensis Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 3; H. C. Lea, 1849, p. 102

Leda carolinensis (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Harris, 1919, p. 70, pl. 25, fig. 17

Nuculana carolinensis (Conrad), Conrad, 1865a, p. 13

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.
Locality.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)
Type.—Missing, ANSP Moore, 1962, p. 46

Nuculana claibornensis (Conrad)
 See *Orthoyoldia claibornensis* (Conrad)

Nuculana cliftonensis (Clark and Martin) **Nuculanidae**

Leda cliftonensis Clark and Martin, 1901, p. 201, pl. 56, fig. 11
 Not *Nuculana* sp. ind. aff. *cliftonensis* (Clark and Martin), Rutsch, 1943, p. 148

Range.—Paleocene. Aquia fm. (type)
Localities.—MD.: Charles Co., Clifton Beach; Liverpool Point.
 VA.: Stafford Co., Aquia Cr.; Potomac Cr.; King George Co., 2 mi. below Potomac Cr. (type)
Type.—Holotype, USNM

Nuculana coelata (Conrad) **Nuculanidae**

Nucula coelata Conrad, 1833a, p. 343; Conrad, App. in Morton, 1834, p. 7 (as *caelata*); H. C. Lea, 1849, p. 102; Harris, 1895b, p. 9 (*caelata*), p. 11 (*coelata*), not *Nucula caelata* Hinds, 1843, p. 99
Nucula Brogniarti [sic] Lea, 1833, p. 82, pl. 3, fig. 61; Conrad, App. in Morton, 1834, p. 7 as *Brongniarti*=*N. caelata* Conrad; H. C. Lea, 1849, p. 102; Tuomey, 1858, p. 266; Harris, 1895b, p. 8; Schenck, 1934, p. 48 as *brongniarti*
Leda coelata (Conrad), Conrad, 1854, p. 29; Dall, 1898b, p. 578; Van Winkle in Van Winkle and Harris, 1919, p. 6, pl. 1, fig. 6; Harris, 1919, p. 57, pl. 23, figs. 7-9; Brann and Kent, 1960, p. 474
Nuculana caelata (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3
Leda Brongniarti [sic] (Lea), de Gregorio, 1890, p. 187, pl. 22, figs. 27-29; fig. 30 copy Lea
Nuculana Brongniarti (Lea), Cossmann, 1893, p. 15
Lembulus coelata (Conrad), Dall, 1898b, p. 579

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.
Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)
Types.—Possible syntypes, Nos. 30575, 30576 ANSP Moore, 1962, p. 48. Possible syntypes, *N. Brongniarti*, Nos. 5409, 5410 ANSP

Nuculana coelatella (Van Winkle) **Nuculanidae**

Leda coelatella Van Winkle in Van Winkle and Harris, 1919, p. 6, pl. 1, figs. 4, 5; Van Winkle, 1921, p. 7 (not middle Eocene); Brann and Kent, 1960, p. 475

Range.—Lower Eocene. Nanjemoy fm. (type)
Locality.—VA.: Hanover Co., Newcastle, S. side of Pamunkey R., $\frac{3}{4}$ -1 mi. E. of bridge on U.S. 360 (type)
Types.—Syntypes, Nos. 1393, 1394 PRI

Nuculana (Hilgardia) coelatooides (Harris) **Nuculanidae**

Leda coelatooides Harris, 1919, p. 58, pl. 23, fig. 10; Brann and Kent, 1960, p. 475
Nuculana (Hilgardia) multilincata coelatooides (Harris), Harris and Palmer, 1946, p. 59, pl. 14, fig. 7; Brann and Kent, 1960, p. 608

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., Wautubbee (type)

Type.—Holotype, No. 580 (4237) PRI

Nuculana compsa (Gabb)

See *Calorhadia* (*Calorhadia*) *compsa* (Gabb)

***Nuculana corpulentoides* (Aldrich)**

Nuculanidae

Yoldia corpulentoides Aldrich, 1895b, p. 18, pl. 5, figs. 9, 9a

Leda corpulentoides (Aldrich), Dall, 1898b, pp. 578, 594

Cf. *Nuculana corpulentoidea* [sic] (Aldrich), Barry, 1942+, p. 46, pl. 2, figs. 8, 9

Nuculana corpulentoidea [sic] (Aldrich), Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 6

Range.—Lower Eocene. Tuscahoma fm. (type) middle Wilcox [Sabine] gr.; ? Pendleton Ferry fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: Choctaw Co., Tuscahoma Ldg., Tombigbee R. (type). TEXAS: for possible localities in Sabine Co. see Barry, 1942+, p. 46

Types.—Syntypes, No. 638965 USNM fig. 9 a double valved specimen now shattered, 1962. No. 638966 USNM herein designated lectotype. Better specimen than No. 638965

***Nuculana corpulentoides* (Aldrich) "var."**

Nuculanidae

Leda corpulentoides (Aldrich) "var." Harris, 1897b, p. 51, pl. 8, figs. 10, 11; Harris, 1899b, p. 301; Brann and Kent, 1960, p. 475

Range.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—TEXAS: Sabine Co., Pendleton, Sabine R. ALA.: Marengo Co., Nanafalia Ldg., Tombigbee R.; Monroe Co., Greggs Ldg., Alabama R.

Types.—Figured specimens, Nos. 151, 152 PRI

***Nuculana crassiparva* (Harris)**

Nuculanidae

Leda crassiparva Harris, 1919, p. 68, pl. 25, figs. 7-9 [fig. 9 in PRI not Aldrich Coll. as in text and on expl. of pl.]; Brann and Kent, 1960, p. 475

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

Types.—Holotype, No. 604; paratype, No. 605 PRI [pl. 25, fig. 9 not in Aldrich Coll. as in Harris, 1919, p. 68]

***Nuculana cultelliformis* (Rogers and Rogers)**

Nuculanidae

Nucula cultelliformis Rogers and Rogers, 1837, p. 339 (reprint 1884, p. 667); H. C. Lea, 1849, p. 102; Schenck, 1934, p. 49

Leda cultelliformis (Rogers and Rogers), Conrad, 1854, p. 29; Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p. 198, pl. 56, figs. 8, 8a

Nuculana cultelliformis (Rogers and Rogers), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Yoldia cultelliformis (Rogers and Rogers), Clark, 1895, p. 5

Leda (*Adrana*) *cultelliformis* (Rogers and Rogers), Clark, 1896, p. 83, pl. 28, figs. 3a, 3b

Leda cultelliformis (Rogers and Rogers), Van Winkle and Harris, 1919, p. 10; Van Winkle, 1921, p. 7 [not middle Eocene]

Range.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: *Hanover Co.*, Newcastle; *King George Co.*, Woodstock; *Prince George Co.*, Evergreen; Coggins Point (type). MD.: *Charles Co.*, Clifton Beach; Popes Cr.; 2 ½ mi. above Popes Cr.; *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. station)

Type.—Probably MCZ

Nuculana eoa (Gardner)

Nuculanidae

Leda eoa Gardner, 1935, p. 118, pl. 6, figs. 1, 2

"*Leda*" *eo*a Gardner, Rutsch, 1943, p. 148

Range.—Paleocene. Littig mem. (type), Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Travis Co.*, USGS Sta. 2439, 1 mi. E. of Webberville (type)

Type.—Holotype, No. 138604 USNM

Nuculana fiski Barry

Nuculanidae

Nuculana fiski Barry, 1942+, p. 45, pl. 2, fig. 5

Range.—Paleocene. "Logansport" (name preoccupied) fm. (type), middle Midway gr. Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.

Localities.—LA.: *Natchitoches Par.*, Rocks Cr. (type). ALA.: *Marengo Co.*, Nanafalia Ldg., Tombigbee R.

Types.—Holotype, No. 5002; paratype, No. 5003, LSU. Pal. Mus.

Nuculana hammetti (Harris)

See *Calorhadia* (*Calorhadia*) *hammetti* (Harris)

Nuculana hannahae Palmer and Brann, new name

Nuculanidae

Leda milamensis Harris, 1896, p. 54, pl. 4, fig. 8; Brann and Kent, 1960, p. 477

Leda (*Saccella*) *milamensis* Harris, Gardner, 1935, p. 121 in part

Not *Leda milamensis* Harris, 1895a, p. 47, pl. 1, fig. 4

Leda milamensis Harris, 1896, from the Paleocene Midway of Tennessee is not the same species as *L. milamensis* Harris, 1895a from the lower Eocene. Gardner, 1935, p. 121 pointed out a critical difference between the shells as well as horizon of the two forms. We are therefore, renaming *Leda milamensis* Harris, 1896, p. 54 not Harris, 1895a, p. 47

Range.—Paleocene. Midway gr. (type)

Localities.—TENN.: *Hardeman Co.*, Hannah's bed f. 1¾ mi. N. of Crainesville (type); Huddleston's about same distance W. of Crainesville (Harris)

Type.—Holotype, No. 39 PRI

Nuculana improcera (Conrad)

Nuculanidae

Nucula improcera Conrad, 1848b, p. 131, pl. 14, fig. 23; Schenck, 1934, p. 51

Nuculana improcera (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Leda improcera (Conrad), Clark, 1895, p. 5; Clark, 1896, p. 83 in part, pl. 28, figs. 1a-d (not $\equiv$ *N. parilis* Conrad var.); Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p. 199, pl. 56, figs. 1-4; Van Winkle in Van Winkle and Harris, 1919, p. 10 [not middle Eocene]

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., Popes Cr., head of Nanjemoy Cr., 2 ½ mi. above Popes Cr. VA.: King George Co., Woodstock; Prince George Co., Evergreen; Hanover Co., Marlbourne (type) [in text]; Caroline Co., Port Royal; [Co. unknown] Marshfield

Type.—Probable holotype, "labelled 'Pamunkey R., Va.' but [Marlbourne] 'Hanover Co., Va.' in text" No. 30673 ANSP Moore, 1962, p. 66

***Nuculana jewetti* (Gardner)**

Nuculanidae

Leda jewetti Gardner, 1927, p. 363, fig. 6

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: Leon Co., 8 mi. S. of Jewett (type)

Type.—Holotype, No. 369243 USNM

***Nuculana kittensis* (Harris)**

Nuculanidae

Leda kittensis Harris, 1919, p. 67, pl. 25, fig. 6

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Calhoun Co., Kitts Ravine, 4½ mi. NW of Creston [Keitts; Cooke, 1936, p. 68] (type)

Type.—Holotype, missing USNM 1962

***Nuculana linifera* Conrad**

Nuculanidae

Nuculana linifera Conrad, 1865b, p. 139, pl. 10, fig. 8

Leda linifera (Conrad), Dall, 1898b, pp. 578, 591, Jackson Eocene only

Nuculana linifera ? Conrad, Harris and Palmer, 1946, p. 60, pl. 14, fig. 8; Brann and Kent, 1960, p. 607

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—MISS.: Clarke Co., "Enterprise" (=Garland Cr.) see Aldrich, 1885c, p. 307; Shubuta

Type.—Holotype, No. 13229 ANSP Moore, 1962, p. 71

***Nuculana magna* (Lea)**

Nuculanidae

Nucula magna Lea, 1833, p. 197, pl. 6, fig. 211; H. C. Lea, 1849, p. 102;

Harris, 1895b, p. 26; Schenck, 1934, p. 51

Nuculana magna (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3;

Cossmann, 1893, p. 15, pl. 1, fig. 19

Leda magna (Lea), de Gregorio, 1890, p. 186, pl. 22, fig. 38 copy Lea;

Dall, 1898b, p. 578; Harris, 1919, p. 62, pl. 24, figs. 3, 4

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5996 ANSP

***Nuculana magna lisbonensis* (Aldrich)**

Nuculanidae

Leda lisbonensis Aldrich, 1895b, p. 17, pl. 5, fig. 4

Leda magna var. *lisbonensis* Aldrich, Harris, 1919, p. 63, pl. 24, figs. 5-7; Brann and Kent, 1960, p. 476

Leda (*Adrana* ?) *lisbonensis* Aldrich, Dall, 1898b, p. 578

Calorhadia (*Litorhadia*) sp. cf. *C. (L.) lisbonensis* (Aldrich), Gardner, 1945, p. 48 in part

Not *Nuculana lisbonensis* Aldrich, Sutton, 1946, p. 1671

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—TEXAS: *San Augustine Co.*, San Augustine "St. Augustine" [sic] Harris, 1919. LA.: *Winn Par.*, St. Maurice rd., 1 mi. SW. of Winnfield Marble Quarry; *Sabine Par.*, 3 mi. S. Negreet P.O.; near mouth Negreet Bayou. ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. GA.: *Clay Co.*, ? Fort Gaines. N.C.: *Craven Co.*, Neuse R., 16-17 mi. and 27 mi. above New Bern

Type.—Holotype, No. 638963 USNM

***Nuculana magnopsis* (Harris)**

Nuculanidae

Leda magnopsis Harris, 1919, p. 64, pl. 24, fig. 8; Brann and Kent, 1960, p. 476

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: *Orangeburg Co.* "Rock [Rocky] Swamp", SE. of Springfield (type)

Type.—Holotype, No. 593 PRI

Nuculana magnifica (Conrad)

See *Nucula magnifica* Conrad

Nuculana magnifica yazooensis (Harris)

See *Nucula magnifica yazooensis* Harris

***Nuculana marieana* (Aldrich)**

Nuculanidae

Leda marieana Aldrich, 1897a, p. 16, pl. 5, fig. 5; Harris, 1897b, p. 5, pl. 8, fig. 12 copy Aldrich

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Choctaw Corner (type)

Type.—Holotype, No. 639002 USNM

Nuculana mater (Meyer)

See *Calorhadia* (*Calorhadia* ?) *mater* (Meyer)

Nuculana media (Lea)

See *Calorhadia equalis* (Conrad)

***Nuculana milamensis* (Harris)**

Nuculanidae

Leda milamensis Harris, 1895a, p. 47, pl. 1, fig. 4; Dall, 1898b, p. 578.

Not *Leda milamensis* Harris, Harris, 1896, p. 54 in part, pl. 4, fig. 8; not Brann and Kent, 1960, p. 477=*N. hannahae* Palmer and Brann, new name herein

Leda (*Saccella*) *milamensis* Harris, Gardner, 1935, p. 121 in part

Range.—Lower Eocene. Lower Wilcox [Sabine] gr. (type)

Locality.—TEXAS: *Milam Co.*, Smileys Bluff, 2 mi. above mouth of Pond Cr., Brazos R. (type) (Gardner, 1935, p. 54)

Type.—Holotype, No. 35671 BEG

Nuculana monroensis (Aldrich)See *Nucula* (*Lamellinucula*) *monroensis* Aldrich*Nuculana mucronata* (Conrad)See *Calorhadia semen* (Lea)See also *Nuculana vanuxemi* (Dall)***Nuculana* (*Hilgardia*) *multilineata* (Conrad)****Nuculanidae**

Leda multilineata Conrad in Wailes, 1854, p. 289, pl. 14, fig. 4 (reprint, 1939, p. 19, pl. 1, fig. 4); Conrad, 1856a, p. 258 (reprint, 1939, p. 4); Hilgard in Hopkins, 1871, p. 11; Harris, 1894b, p. 148; Dall, 1898b, pp. 578, 588 in part, not pl. 25, figs. 11, 11b Oligocene; Harris, 1919, p. 58, pl. 23, figs. 11, 12; Brann and Kent, 1960, p. 477

Nuculana (*Hilgardia*) *multilineata* (Conrad), Harris and Palmer, 1946, p. 59, pl. 14, figs. 2-6; Brann and Kent, 1960, p. 608

"*Leda*" *multilineata* Conrad, Gardner, 1939, p. 341

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Clarke Co.*, "near Enterprise", Garland Cr. *vide* Aldrich, 1885c, p. 307; *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, "at various localities on the Ouachita River." ARK.: *Cleveland Co.*, Vince Bluff, Saline R.; Cross Roads Church, 5 mi. NW. of Kingsland

Type.—"Donated to ANSP by Wailes, 1855" *vide* Harris, 1919, p. 59. Missing ANSP Moore, 1962, p. 79

Nuculana opulenta (Conrad)See *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)*Nuculana opulenta*-like Harris and PalmerSee *Calorhadia cf. opulenta* (Conrad)*Nuculana ovula* (Lea)See *Nucula* (*Nucula*) *ovula* Lea***Nuculana ozarkola* (Harris)****Nuculanidae**

Leda ozarkola Harris, 1919, p. 68, pl. 25, figs. 10-14; Brann and Kent, 1960, p. 478

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Hamilton Bluff, Alabama R. (type); *Dale Co.*, Ozark

Types.—Syntypes, Nos. 606-610 PRI

Nuculana parilis* (Conrad)*Nuculanidae**

Nucula parilis Conrad, 1848b, p. 132, pl. 14, fig. 31; Clark, 1896, p. 93; Schenck, 1934, p. 52

Nuculana parilis (Conrad), Conrad, 1865a, p. 13

Leda parilis (Conrad), Clark and Martin, 1901, p. 199, pl. 57, figs. 1, 2, 2a

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: *Prince Georges Co.*, Upper Marlboro (type); *Anne Arundel Co.*, Sheckel's farm near South R.

Type.—Probable holotype, No. 30687 ANSP Moore, 1962, p. 83

Nuculana parilis (Conrad) "var."**Nuculanidae**

Leda improcera Conrad, Clark, 1896, p. 83 in part, pl. 28, fig. 1e

Leda parilis Conrad var., Clark and Martin, 1901, p. 200, pl. 57, fig. 3 copy Clark, 1896

Range.—Lower Eocene. Nanjemoy fm.

Localities.—VA.: King George Co., probably Woodstock. MD.:

Prince Georges Co., Hills Bridge

Type.—Figured specimen, USNM

Nuculana parva (Rogers and Rogers)

See *Saccella parva* (Rogers and Rogers)

Nuculana pharcida (Dall)

See *Calorhadia* (*Calorhadia*) *pharcida* (Dall)

Nuculana plana (Lea)**Nuculanidae**

Nucula plana Lea, 1833, p. 199, pl. 6, fig. 213; H. C. Lea, 1849, p. 102; Harris, 1895b, p. 35; Schenck, 1934, p. 53. *N. plana* has usage over page preference of *N. pulcherrima*

Nucula pulcherrima Lea, 1833, p. 84 in part, pl. 3, fig. 63; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 102 in part; Harris, 1895b, p. 37 in part; Schenck, 1934, p. 53

Nuculana plana (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3; Cossmann, 1893, p. 15

Nuculana pulcherrima (Lea), Conrad, 1865a, p. 13; Conrad, 1866a, p. 4; Cossmann, 1893, p. 15

Leda plana (Lea), de Gregorio, 1890, p. 188, pl. 23, fig. 5 copy Lea; Harris, 1919, p. 60, pl. 23, figs. 14, 15; figs. 16, 17 copies of *N. pulcherrima* Lea; Brann and Kent, 1960, p. 478

Leda pulcherrima (Lea), Meyer, 1887a, p. 15; de Gregorio, 1890, p. 190, pl. 23, fig. 12 copy Lea

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). N.C.: Craven Co., "17 mi. above Newbern", Neuse R. (Harris)

Type.—Holotype, No. 5998 ANSP

Nuculana plicata (Lea)

See *Calorhadia bella* (Conrad)

Nuculana protexta Conrad, 1865c, p. 147

See *Calorhadia* (*Calorhadia*) *pharcida* (Dall)

Nuculana pulcherrima (Lea)

See *Nuculana plana* (Lea)

See also *Calorhadia* (*Calorhadia*) *opulenta* (Conrad)

Nuculana regina-jacksonis (Harris)

See *Calorhadia* (*Calorhadia*) *regina-jacksonis* (Harris)

Nuculana regina-jacksonis (Harris) var.

See *Calorhadia* (*Calorhadia*) *regina-jacksonis* (Harris) "var."

Nuculana (*Saccella*) *robusta* (Aldrich)

See *Saccella robusta* (Aldrich)

Nuculana saffordana (Harris)**Nuculanidae**

Leda protexta Gabb, 1860d, p. 397, pl. 68, fig. 36 (not fig. 35 as in text); not *Leda protexta* Gabb, 1860a, p. 303, pl. 48, fig. 23 [= *Nuculana protexta* (Gabb) Cretaceous]

Leda saffordana Harris, 1896, p. 55, pl. 4, fig. 9; Dall, 1898b, p. 586; ? Gardner, 1935, p. 117

"*Leda*" *saffordana* Harris, Rutsch, 1943, p. 149

Range.—Paleocene. Kincaid fm., lower Midway gr.; Naheola fm., upper Midway gr. (type)

Localities.—TENN.: *Hardeman Co.* (type), 2 mi. S. of Middleton. ALA.: *Wilcox Co.*, $\frac{1}{2}$ mi. N. of Snow Hill. GA.: Chattahoochee R. (near base of Eocene). ? TEXAS: *Falls Co.*, Little Brazos R., above Rocky Crossing on Kosse rd.

Type.—Holotype, unknown. Type was in Safford Coll. seen by Harris, 1896

Nuculana semen (Lea)

See *Calorhadia semen* (Lea)

[*Nuculana*] *smirna* (Dall)

See *Jupiteria smirna* (Dall)

Nuculana subtrigona (Conrad)**Nuculanidae**

Nucula subtrigona Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 4; H. C. Lea, 1849, p. 102; Schenck, 1934, p. 54

Leda subtrigona (Conrad), Conrad, 1854, p. 29; Harris, 1919, p. 70, pl. 25, fig. 18. Specimens in ANSP so labelled compared to *L. houstonia* Harris, 1919, p. 59

Nuculana subtrigona (Conrad), Conrad, 1865a, p. 14; Conrad, 1866a, p. 4

Range.—Middle Eocene [—horizon uncertain *vide* Harris, 1919, p. 70]. McBean fm. (*vide* Cooke), upper Claiborne gr.

Locality.—S.C.: *Calhoun Co.*: "St. Matthews Parish, Orangeburg District" (type)

Type.—Missing ANSP Moore, 1962, p. 100

Nuculana trivitate (Gardner)**Nuculanidae**

Leda houstonia Harris, 1919, p. 59 in part, pl. 23, fig. 13. Not *L. houstonia* Harris, 1895a, p. 47

Leda trivitate Gardner, 1927, p. 363, fig. 5

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS: *Wilson Co.*, Bluff on San Antonio R., 4 mi. SSE. of Floresville (type); *Houston Co.*, Alabama Ferry, Trinity R.

Type.—Holotype, No. 369248 USNM

Nuculana trumani (Harris)**Nuculanidae**

Leda trumani Harris, 1919, p. 61, pl. 23, figs. 18, 19; Brann and Kent, 1960, p. 480

Range.—Middle Eocene. Cook Mt. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); Hamilton Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 and 6 miles WNW. of Orangeburg. GA.: *Clay Co.*, Ft. Gaines

Type.—Holotype, No. 585 PRI

Nuculana tysoni (Clark and Martin)**Nuculanidae**

Leda tysoni Clark and Martin, 1901, p. 201, pl. 57, figs. 4, 4a, 5

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., Popes Cr.; 2 ¼ to 3 mi. above Popes Cr.; Prince Georges Co., 1 mi. SE. of Piscataway. VA.: King George Co., Woodstock (type)

Types.—Syntypes, USNM

Nuculana vanuxemi (Dall)**Nuculanidae**

Nucula mucronata Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 2; H. C. Lea, 1849, p. 102. Not James de C. Sowerby, 1824, p. 120, pl. 476, fig. 4

Nuculana mucronata (Conrad), Conrad, 1865a, p. 13 not Vicksburg as in Conrad

Leda vanuxemi Dall, 1898b, p. 578 new name for *Nucula mucronata* Conrad; Harris, 1919, p. 70, pl. 25, fig. 16 copy Conrad, 1848b, *Nucula mucronata* Conrad

See also under *Calorhadia semen* (Lea) with question.

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Type.—Holotype, "Vanuxem Coll." not listed Moore, 1962

Nuculana wautubbeana (Harris)**Nuculanidae**

Leda wautubbeana Harris, 1919, p. 69, pl. 25, figs. 15, 15a; Brann and Kent, 1960, p. 480

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Clarke Co., Wautubbee (holotype); Newton Co., Newton (paratype). LA.: Winn Par., Calvin

Types.—Holotype, No. 611 PRI; paratype, Aldrich Coll. lost

Nuculana sp. Harris and Palmer, 1946

See *Ledina* sp.

See also *Saccella* sp.

Nuculana sp.**Nuculanidae**

Leda, n. sp. Gardner, 1935, p. 119, pl. 6, figs. 3, 4

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Medina Co., USGS Sta. 11771, 5 mi. SE. of Elstone

Type.—Figured specimen, No. 370958 USNM

Nuculana sp.**Nuculanidae**

Nuculana sp. Harris, 1951, p. 15, pl. 7, figs. 2, 3; Brann and Kent, 1960, p. 610

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: Houston Co., Georgia Lime Rock Quarry, 3.9 mi. from Perry

Types.—Figured specimens, Nos. 24470, 24471 PRI

Nuculana sp.**Nuculanidae**

Nuculana sp. Barry, 1942+, p. 46

Range.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.

Locality.—LA.: Sabine Par., stream bank in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 3, T. 5 N., R. 13 W.

Type.—Figured specimen, No. 5373 LSU Pal. Mus.

Nucularia secunda (Whitfield)

See *Nucula secunda* Whitfield

Odontogryphaea thirsae (Gabb)**Ostreidae**

Ostrea emarginata Tuomey (name only), 1858, pp. 266, 269, 271

Gryphaea thirsae Gabb, 1862a, p. 329; Aldrich, 1886, p. 58

Ostrea thirsae (Gabb), Heilprin, 1884c, p. 311, pl. 63, figs. 4-6; de Gregorio, 1890, p. 178, pl. 20, figs. 2, 9, 10 copies Heilprin; Cossmann, 1893, p. 19; Harris, 1897b, p. 40, pl. 6, figs. 5, 5a, 6; Dall, 1898b, pp. 680, 681; Harris, 1899b, p. 300, pl. 53, fig. 1; Schuchert, *et al.*, 1905, p. 474; Veatch, 1906, p. 35, pl. 18, figs. 2, 2a copies Heilprin; cf. Maury, 1912, p. 39, pl. 5, figs. 6-8; Cooke, 1926a, pl. 94, figs. 6a, b; Semmes, 1929, fig. 59-6a, 6b; Trowbridge, 1932, pl. 39, figs. 3-5 copy Harris, 1897b; Barry, 1942+, p. 51, pl. 3, figs. 7, 8; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 2; Gardner, 1945, p. 76 in part, pl. 5, figs. 16, 18 holotype; figs. 15, 17, 19; Richards, 1948, p. 2, pl. 4, fig. 23; Brann and Kent, 1960, p. 642

Ostrea cf. thirsae (Gabb), Richards, 1950, p. 15

Odontogryphaea thirsae (Gabb), Stenzel, 1947, p. 166

Range.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.; Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: Marengo Co. "Nanafalia" [Bluff], Tombigee R. (type); not Eufaula (as in Schuchert, *et al.*, 1905). GA.: Clay Co., between Fort Gaines and Woods Shoals. LA.: Natchitoches Par., Marthaville. See Barry, 1942+, p. 52 for further La. localities. N.C.: Johnston Co., about 3 mi. W. of Clayton

Type.—Lectotype, No. 494957 ["570"] USNM

The information regarding the type of *O. thirsae* is confusing in Schuchert, *et al.*, 1905, "USNM 570 . . . pleisotype . . . Eocene Eufaula Alabama."

Druid Wilson kindly supplied the following information regarding the discrepancy of type, locality, and age.

"570/Gryphaea thirsae Gabb/Eufaula, Ala./Cretaceous Ripley Group/Prepared by State Univ. of Alabama.

"One of these specimens was figured by Heilprin in White, 1884a and the same specimen was figured by Gardner as holotype 1945 (GSA Mem. 11) at which time it was recatalogued thus:

494957/"570"/*Ostrea thirsae* Gabb/Nanafalia, Marengo Co., Ala./Wilcox/Figd. holotype.

"The earliest label now with the specimen is Heilprin's which gives 'Eocene/Eufaula, Ala.'

"All of this leaves unexplained the source of Gabb's quoted 'Nanafalia' a locality that subsequent collections uphold.

"There probably were older labels giving Nanafalia and the catalogue must be in error, but there is no contemporary evidence to prove it.

"The specimen apparently is the one measured by Gabb and would be the obligatory lectotype; the other two syntypes have not been found.

"Schuchert's, Dall's, *et al.* listing of USNM 570 as Plesiotype probably resulted from their not realizing that it was a part of Gabb's original material."

Omnivenus discoidalis (Conrad)

See *Rhaddopitaria discoidalis* (Conrad)

Orthoyoldia claibornensis (Conrad)

Nuculanidae

Nucula claibornensis Conrad, 1848b, p. 131, pl. 14, fig. 22; Harris, 1895b, p. 11

Nuculana claibornensis (Conrad), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Leda claibornensis (Conrad), de Gregorio, 1890, p. 189, pl. 22, figs. 32, 33; 35, 36; fig. 34 copy Conrad

Yoldia claibornensis (Conrad), Dall, 1898b, p. 594, 596; Harris, 1919, p. 72, pl. 25, fig. 24 copy Conrad

Orthoyoldia claibornensis (Conrad), Stewart, 1930, p. 61; Stenzel, Krause, and Twining, 1957, pp. 53, 55 "a dubious species"

Range.—Middle Eocene. Claiborne gr., horizon unknown

Locality.—ALA.: Monroe Co., "Claiborne", Alabama R. (type) Conrad, (exact horizon unknown)

Type.—Missing ANSP *fide* Harris 1895b, p. 11; Moore, 1962, p. 48

Cf. Orthoyoldia kindlei (Harris)

Nuculanidae

Yoldia kindlei Harris, 1896, p. 56, pl. 4, fig. 6; Dall, 1898b, p. 594;

Harris and Veatch, 1899, p. 72; Barry, 1942+, p. 47, pl. 2, fig. 10;

Brann and Kent, 1960, p. 983

Range.—Paleocene. "Logansport fm." (name preoccupied), middle Midway gr., (Sabine and Natchitoches Par., La.); undifferentiated Midway (Tenn.) (type)

Localities.—TENN.: Hardeman Co., 1 $\frac{3}{4}$ mi. N. of Crainesville, at Hannah's (type). LA.: Natchitoches Par., Rocks Cr.; Sabine Par., ravine center of NW. $\frac{1}{4}$ sec. 1, T. 9 N., R. 12 W.; 2 $\frac{1}{2}$ mi. NE. of Pleasant Hill in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 23, T. 10 N., R. 11 W.

Type.—Holotype, No. 35 PRI

Orthoyoldia psammotaea (Dall)

Nuculanidae

Yoldia psammotaea Dall, 1898b, p. 596, pl. 34, fig. 20 (section *Orthoyoldia*); Schuchert, *et al.*, 1905, p. 702

Yoldia psammotaea Dall, Harris, 1919, p. 72 in part, pl. 25, figs. 25, 27, 29 (not figs. 26, 28=*Orthoyoldia* sp., not fig. 30=var. *orangeburgensis*, not fig. 31=var. *vivianensis*); Renick and Stenzel, 1931, p. 104; Brann and Kent, 1960, pp. 983, 984

Orthoyoldia psammotaea (Dall), Stewart, 1930, p. 61; Gardner, 1945, p. 50, pl. 4, figs. 2, 3; Stenzel, Krause, and Twining, 1957, p. 54, pl. 4, figs. 26-30

? *Yoldia* cf. *Y. psammotaea* [sic] Dall, Trowbridge, 1932, pl. 43, fig. 1 (questionable)

Yoldia (*Nuculana* ?) *psammotaea* Dall, Harris and Palmer, 1946, p. 57 in part, pl. 13, figs. 20, 21 (same specimen as Harris, 1919, pl. 25, fig. 29)

Range.—Middle Eocene. Viesca mem., Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), ["Claiborne sands, Claiborne, Ala." type locality incorrect *vide* Harris, 1919, p. 72.] Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R. TEXAS: *Brazos Co.*, Little Brazos R., 2½ mi. above Stone City; *Burleson Co.*, Stone City Bluff, Brazos R.; Cedar Cr.; *Bastrop Co.*, Smithville, Colorado R. ? S.C.: *Calhoun Co.*, Kitts Ravine [Keitts]. See Harris, 1919, for additional localities not verified.

Type.—Holotype, No. 129799 USNM

Orthoyoldia psammotaea orangeburgensis (Harris) Nuculanidae

Yoldia psammotaea var. *orangeburgensis* Harris, 1919, p. 73, pl. 25, fig. 30; Brann and Kent, 1960, p. 984

Orthoyoldia psammotaea orangeburgensis (Harris), Stenzel, Krause, and Twining, 1957, p. 55

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Localities.—S.C.: *Orangeburg Co.*, 5 mi. N. (type); NW. of Orangeburg

Type.—Holotype lost prior to 1937 PRI

Orthoyoldia psammotaea vivianensis (Harris) Nuculanidae

Yoldia psammotaea var. *vivianensis* Harris, 1919, p. 73, pl. 25, fig. 31; Brann and Kent, 1960, p. 984

Orthoyoldia psammotaea vivianensis (Harris), Stenzel, Krause, and Twining, 1957, p. 55

Range.—Middle Eocene. Recklaw fm. (type), middle Claiborne gr. [*vide* Stenzel, Krause, and Twining, 1957, p. 55]

Locality.—LA.: *Caddo Par.*, Vivian (type)

Type.—Holotype, No. 616 PRI

Orthoyoldia rubamnis (Harris) Nuculanidae

Yoldia psammotaea ? var. *rubamnis* Harris in Harris and Palmer, 1946, p. 58, pl. 14, fig. 1; Wilbert, 1953, pp. 98, 122; Brann and Kent, 1960, p. 984

Orthoyoldia rubamnis (Harris), Stenzel, Krause, and Twining, 1957, p. 53

Range.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

Locality.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R. (type)

Type.—Holotype, No. 4231 PRI

Orthoyoldia sp. Nuculanidae

Yoldia psammotaea Dall, Harris, 1919, p. 72 in part, pl. 25, fig. 26; Brann and Kent, 1960, p. 984

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

Type.—Figured specimen, No. 614 PRI

Orthoyoldia sp.**Nuculanidae**

Yoldia psammotaca Dall, Harris, 1919, p. 72 in part, pl. 25, fig. 28

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Locality.—S.C.: *Calhoun Co.*, Kitts [Keitts] Ravine

Type.—Figured specimen, missing USNM 1962

Orthoyoldia ? sp.**Nuculanidae**

Yoldia (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p. 57, pl. 13, fig. 17 as *Yoldia* sp.

Yoldia sp., Brann and Kent, 1960, p. 984

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Locality.—LA.: *Grant Par.*, Montgomery, Red R.

Type.—Figured specimen, No. 4228 PRI

Orthoyoldia ? sp.**Nuculanidae**

Yoldia (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p., 57, pl. 13, fig. 19 as *Yoldia* sp.

Yoldia sp., Brann and Kent, 1960, p. 984

Range.—Upper Eocene. Jackson gr.

Locality.—ALA.: *Clarke Co.*, Little Stave Cr. near Jackson

Type.—Figured specimen, No. 4229 PRI

Orthoyoldia ? sp.**Nuculanidae**

Yoldia (*Nuculana* ?) *psammotaca* Dall "var.", Harris and Palmer, 1946, p. 57, pl. 13, fig. 19 as *Yoldia* sp.

Yoldia sp. Brann and Kent, 1960, p. 984

Range.—Upper Eocene. White Bluff fm., lower Jackson gr.

Locality.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R.

Type.—Figured specimen, No. 4230 PRI

Oryctomya bryani (Clark)**Arcticidae**

Coralliophaga bryani Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, figs. 2a, 2b; Clark and Martin, 1901, p. 183, pl. 43, figs. 1, 1a; figs. 2, 2a copy holotype; Dall, 1903a, p. 1500 *O. Bryani*; Schuchert, *et al.*, 1905, p. 163

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: *Charles Co.*, 1 mi. SE. of Mason Springs; *Prince Georges Co.*, "Pamunkey Neck" (type)=Pomonkey Clark and Martin

Type.—Holotype, No. 115804 USNM

Oryctomya claibornensis Dall**Arcticidae**

Coralliophaga (*Oryctomya*) *claibornensis* Dall, 1898a, p. 135; Harris, 1919, p. 154, pl. 48, figs. 5, 5a copy Dall

Oryctomya claibornensis Dall, Dall, 1898b, p. 929, pl. 34, figs. 16, 16a; Dall, 1903a, p. 1499; Schuchert, *et al.*, 1905, p. 467

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 129541 USNM

Cf. *Oryctomya prima* (Harris)**Arcticidae**

Coralliophaga prima Harris, 1897b, p. 60, pl. 13, figs. 4, 4a, 5; Dall, 1898a, p. 135; Brann and Kent, 1960, p. 251

Oryctomya prima (Harris), Dall, 1903a, p. 1500

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. (possibly also middle Wilcox [Sabine] gr., Harris, 1897b)

Localities.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type); Monroe Co., Greggs Ldg., Alabama R. (probably)

Types.—Syntypes, Nos. 172, 173 PRI

Ostrea alabamiensis Lea

See *Crassostrea alabamiensis* (Lea)

Ostrea alabamiensis Lea, Harris, 1897b

See *Crassostrea* sp.

Ostrea alabamiensis of authors, not Lea, 1833

See *Crassostrea amichel* (Gardner)

Ostrea alabamiensis Lea, Harris in Harris and Palmer, 1946

See *Crassostrea* sp.

Ostrea alabamiensis Lea, Renick and Stenzel, 1931, not Lea, 1833

See *Crassostrea frionis* (Harris)

Ostrea alabamiensis Lea "var.", Harris, 1919

See *Crassostrea* sp.

Ostrea alabamiensis (var. *contracta*) Conrad, Harris, 1919

See *Crassostrea gigantissima* (Finch)

See also *Crassostrea contracta* (Conrad)

Ostrea alabamiensis frionis Harris

See *Crassostrea frionis* (Harris)

Ostrea alabamiensis georgiana Conrad

See *Crassostrea contracta* (Conrad)

See also *Crassostrea gigantissima* (Finch)

Ostrea alabamiensis linguaecanis Lea, de Gregorio, 1890

See *Crassostrea alabamiensis* (Lea)

Ostrea alabamiensis pincerna de Gregorio

See *Crassostrea alabamiensis* (Lea)

Ostrea alabamiensis semihunata Lea

See *Crassostrea alabamiensis* (Lea)

Ostrea alepidota* Dall*Ostreidae**

Ostrea compressirostra var. *alepidota* Dall, 1898b, p. 680; Clark and Martin, 1901, p. 191

Range.—Paleocene, Aquia fm. (type)

Localities.—MD.: Prince Georges Co., Fort Washington. VA.: Stafford Co., Aquia Cr. (type). S.C.: "Eocene" Dall

Type.—Not found USNM 1962

The form was never figured. The type is not available, hence its relationship is indefinite.

Ostrea (Ostrea) arrosis Aldrich**Ostreidae**

Ostrea arrosis Aldrich, 1904, p. 61, pl. 3, figs. 1-4

See *O. intermedioides* Aldrich, 1921, pl. 3, figs. 15, 16

Range.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.

Locality.—ALA.: Dale Co., Fleming's Mill on Pea R., near center sec. 7, T. 7 N., R. 23 E., near Beck Mill (type)

Types.—Syntypes, Nos. 639026, 639027, 639028 USNM

Ostrea bellovacina Conrad, 1842b, p. 172; not Lamarck, 1806a, p. 159

See *Ostrea sinuosa* Rogers and Rogers

Ostrea bryani Gabb**Ostreidae**

Ostrea Bryanii Gabb, 1877, p. 321

Ostrea bryani Gabb, White, 1884a, p. 293; Weller, 1907, p. 448, pl. 44, figs. 1-5

Gryphaea Bryani (Gabb), Whitfield, 1885, p. 206, pl. 27, figs. 6-9 syntypes, Whitfield, 1899, p. 158

Gryphaea Bryani var. *precedens* Whitfield, 1885, p. 194, pl. 26, figs. 7, 8; Whitfield, 1899, p. 158; Weller, 1907, p. 448 under *O. bryani* Gabb

Ostrea glandiformis Whitfield, 1885, p. 205, pl. 27, figs. 1-5; Whitfield, 1899, p. 162; Weller, 1907, p. 449 under *O. bryani* Gabb

Gryphaea bryanii (Gabb), Johnson, 1905, p. 11

Range.—Lower Eocene. Vincentown fm. (type); Manasquan fm. Middle Eocene. Shark R. ml., upper Claiborne gr.

Localities.—N.J.: Burlington Co., Vincentown (type *O. bryani*; syntype *O. glandiformis*); Ocean Co., near New Egypt (type *O. precedens*); Monmouth Co., Farmingdale (syntype *O. glandiformis*); Shark R.; Squankum

Types.—*O. bryani* syntypes, ANSP; *O. glandiformis* Whitfield syntypes, State Mus., Trenton, N.J.; *O. bryani precedens* Whitfield, syntype 8975/1 AMNH

Ostrea Camera Tuomey, 1848, p. 154; Harris, 1919, p. 200 *nomen nudum*

Ostrea carolinensis Conrad**Ostreidae**

Ostrea Carolinensis Conrad, 1832b, p. 27, pl. 14, fig. 1 (Harris reprint 1893, p. 45, pl. 14, fig. 1); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 103; d'Orbigny, 1850, p. 395; Conrad, 1865a, p. 15; Conrad, 1866a, p. 3; not Conrad, 1865f, p. 71 see *G. sylvaerupis* (Harris); not Conrad, 1865h, p. 266 see *G. sylvaerupis* (Harris); Heilprin, 1884c, p. 309; Dall, 1898b, p. 686 in part; Harbison, 1944, p. 4, pl. 4, fig. 2; Cooke and MacNeil, 1952, p. 24

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

Locality.—S. C.: Berkeley Co., Santee-Cooper Canal, 17 mi. NW. of Moncks Corner (type)

Type.—Missing ANSP Moore, 1962, p. 46

Ostrea carolinensis Conrad, 1865f, 1865h; not Conrad, 1832b

See *Gigantostrea sylvaerupis* (Harris)

Ostrea claibornensis Conrad ms. *nomen nudum*

See *Crassostrea alabamiensis* (Lea) [fide Harris, 1895b, pp. 3, 11]

"*Ostrea compressirostra* Say" of authors Eocene

See *Ostrea sinuosa* Rogers and Rogers

Ostrea compressirostra Say, Clark, 1896; Clark and Martin, 1901; Vokes 1961. Not Say, 1824b

See *Ostrea* sp.

Ostrea compressirostra Say, Tuomey, 1850; not Say, 1824b

See *Gigantostrea sylvaeurupis* (Harris)

Ostrea compressirostra Say, Clark

See *Ostrea* sp.

Ostrea compressirostra Say, Smith and Johnson, 1887; not Say, 1824b

See *Gigantostrea sylvaeurupis* (Harris)

Ostrea compressirostra Say, Langdon, 1894 not Say, 1824b

See *Ostrea crenulimarginata* Gabb

Ostrea compressirostra var. *alepidota* Dall

See *Ostrea alepidota* Dall

Ostrea contracta Conrad

See *Crassostrea contracta* (Conrad)

Ostrea contracta amichel Gardner

See *Crassostrea amichel* (Gardner)

***Ostrea* ? *convexa* Say**

Ostreidae

Ostrea convexa Say, 1820, p. 42

Gryphaea convexa (Say), Weller, 1907, p. 451, pl. 45, figs. 1, 2 synonymy; Richards in Richards, *et al.*, 1958, p. 114, pl. 19, figs. 7-8 see for discussion.

O. convexa a common Cretaceous species was described from the Cretaceous. It is still in an indefinite state of specific determination.

Range.—Upper Cretaceous (type). Paleocene. Hornerstown fm.

Localities.—N.J.: Burlington Co., Burlington (type); Ocean Co., New Egypt; Salem Co., Woodstown

Type.—[?] Originally ANSP

***Ostrea crenulimarginata* Gabb**

Ostreidae

Ostrea denticulifera Gabb, 1860d, p. 398, not Conrad, 1858c, p. 330; Safford, 1869, p. 419 not Conrad, 1858c, p. 330

Ostrea crenulimarginata Gabb, 1860d, p. 398, pl. 68, figs. 40, 41; White, 1884a, p. 294, pl. 40, fig. 2 copy Gabb; Harris, 1896, p. 45, pl. 1, figs. 1, 1a; pl. 2, figs. 1, 1a copies *O. tumidula* Aldrich, pl. 3, fig. 1; Dall, 1898b, p. 667; ? Harris, 1899b, p. 297, pl. 52, figs. 1, 1a; Veatch, 1906, p. 33, pl. 16, fig. 2, 2a copy *O. tumidula* Aldrich; cf. Maury, 1912, p. 36, pl. 5, fig. 11; pl. 6, fig. 1-4 copies Aldrich, 1894b *O. tumidula*, and Harris, 1896; Deussen, 1924, p. 43, pl. 14, figs. 2, 2a copies *O. tumidula* Aldrich; Cooke, 1926a, pl. 93, figs. 5a, 5b; Semmes, 1929, fig. 51-5a, 5b; Trowbridge, 1932, pl. 30, figs. 5, 6; Gardner, 1935, p. 139, pl. 10, fig. 2; pl. 11, fig. 9; Toulmin and La Moreaux, 1963, p. 394

Ostrea prae-compressirostra Harris, 1894b, p. 39; Schuchert, *et al.*, 1905, p. 471

Ostrea tumidula Aldrich, 1894b, p. 242, pl. 14, figs. 1, 2; pl. 15, figs. 1, 2

Ostrea compressirostra Say, Langdon, 1894, p. 413 not Say, 1824b

Range.—Paleocene. Tehuacana mem., Kincaid fm., lower Midway gr.; Clayton fm., lower Midway gr. (type)

Localities.—TENN.: *Hardeman Co.*, 2 mi. E. of Middleton (type); 2 mi. S. of Middleton; Muddy Cr. E. of Middleton; McDonald's mill, 4 mi. SW. of Middleton. ARK.: "Midway cf.", *Pulaski Co.*, well at Little Rock. ALA.: *Wilcox Co.*, 1 mi. N. of Midway; 1 mi. W., 1½ mi. SW. and 1 mi. S. of Palmer's mill; *Prairie Cr. LA.*: *Sabine Par.*, Raines place near Rocky Spring church, about 6 mi. WSW. of Marthaville. "Also near Cretaceous-Eocene borderline in Texas, Arkansas, Tennessee, Mississippi, Alabama, and Georgia", Harris, 1899b, p. 298. For additional Texas localities see Gardner, 1935, p. 140. GA.: Chattahoochee R. area (see Toulmin and La Moreaux, 1963)

Types.—Syntypes *Ostrea crenulimarginata* Gabb unknown; types in Safford Coll. seen by Harris, 1896. Syntypes *O. praecompressirostra* Harris, No. 107336 USNM, not found, 1962. Syntypes (2) *Ostrea tumidula* Aldrich left valve No. 106, right valve No. 107 GSATC

Ostrea cretacea Morton, Aldrich, 1895b

See *Ostrea* spp.

Ostrea denticulifera Conrad

See *Ostrea crenulimarginata* Gabb

***Ostrea* ? *dissimularis* (Weller)**

Ostreidae

Gryphaea dissimularis Weller, 1907, p. 453, pl. 46, figs. 2, 3 [not, 4 as ex pl.]

Range.—Paleocene. Hornerstown fm. (type)

Localities.—N.J.: *Salem Co.*, 2 mi. NE. Woodstown (type); *Gloucester Co.*, 1 mi. SE. of Mullica Hill; *Ocean Co.*, Crosswicks Creek, 1 mi. N. of New Egypt

Type.—Holotype, No. 7488 State Mus. Trenton, N.J.

Ostrea divaricata Lea

See *Cubiostrea* (*Cubiostrea*) *divaricata* (Lea)

***Ostrea* (*Ostrea*) *duvali* Gardner**

Ostreidae

Ostrea duvali Gardner, 1927, p. 366, figs. 1-4

Ostrea multilirata Conrad var. *duvali* Gardner, Stenzel, 1957a, p. 888

Range.—Lower Eocene. Probably Indio fm. (type), lower Wilcox [Sabine] gr.

Localities.—TEXAS: *Bastrop Co.*, Austin-Elgin Ferry rd., 1 mi. N. of Austin-Bastrop Highway (type); Caldwell Knob; *Guadalupe Co.*, 1 mi. NE. of New Berlin

Types.—Syntypes, No. 369239 USNM

Ostrea emarginata Tuomey

See *Odontogryphaea thirsae* (Gabb)

Ostrea eversa "Mellville" Heilprin, 1884c, p. 310 in part

See *Ostrea* (*Gryphaeostrea*) *subversa* Conrad nomen nudum

***Ostrea falciformis* Conrad [*Cubitostrea*]**

Ostreidae

Ostrea falciformis Conrad, 1863a, p. 291 in part "Enterprise, Miss."; Conrad, 1865b, p. 140 in part, pl. 11, fig. 1 "Enterprise, Miss." = Garland Creek, Miss., Jackson Eocene, *vide* Aldrich, 1885c, p. 307;

Conrad, 1866a, p. 3 "Ala."; Heilprin, 1884c, p. 311; de Gregorio, 1890, p. 175 under *O. sellaeformis*, pl. 20, figs. 5, 6 copy Conrad; Dall, 1898b, p. 677 under *O. sellaeformis*. Not *O. falciformis* Goldfuss, 1833, p. 22; 1862 (2 ed.), p. 21

Ostrea (Cubitostrea) falciformis Conrad, Sacco, 1897b, p. 14

In part *Cubitostrea (Cubitostrea) sanctiaugustini* Stenzel and Twining, 1957, p. 93 "new name for *Ostrea falciformis* Conrad, 1865"

Ostrea falciformis Conrad is ambiguous as to locality and age. Conrad stated the species was from Enterprise, Miss., from Dr. Spillman. Aldrich (1885c, p. 307) proved that Conrad was in error, and the Spillman Enterprise material was probably from Garland Cr., Miss., Jackson Eocene. However, the figures of Conrad, 1865b are not that of a Jackson species but do appear similar to the *C. sellaeformis* stock and particularly *C. sanctiaugustini* Stenzel and Twining. But because there is uncertainty concerning *O. falciformis* Conrad it would be better not to attach the name *C. sanctiaugustini* to it as was indicated by Stenzel and Twining. If *C. sanctiaugustini* is a new name for *O. falciformis* Conrad, it should have the same type and type locality as *O. falciformis*. But Stenzel and Twining used a new type from the Weches fm. near San Augustine, Tex. Although the figure of Conrad is similar to that of Stenzel and Twining we doubt the propriety of combining the two names. We, therefore, retain *O. falciformis* status uncertain, new name required, but not worthy of renaming. We limit *C. sanctiaugustini* to Claiborne gr., Texas.

Types.—Probable syntypes (2), No. 13232 ANSP Moore, 1962, p. 60

Ostrea falciformis Conrad, 1863a, in part; 1865b in part

See *Cubitostrea (Cubitostrea) sanctiaugustini* Stenzel and Twining in part

***Ostrea falco* Dall**

Ostreidae

Ostrea falco Dall, 1896b, p. 22; Dall, 1898b, p. 682, pl. 30, figs. 4, 11; Schuchert, *et al.*, 1905, p. 469; Cooke, 1926a, p. 274, pl. 96, fig. 4; Kellum, 1926, p. 18; Semmes, 1929, fig. 62-4; Harris and Palmer, 1946, p. 20, pl. 3, figs. 1-9 "var."; cf. Richards and Palmer, 1953, p. 45 unfigured; Brann and Kent, 1960, p. 634

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—ALA.: Choctaw Co., Cocoa P.O. (type); Waynesboro rd. about 5 mi. W. of Silas. MISS.: Clarke Co., 2 mi. E. of Shubuta. LA.: Grant Par., Montgomery, Red R.

Types.—Syntypes, No. 129972 USNM

Ostrea flabellula ? Lamarck, H. C. Lea, 1849, p. 103; Heilprin, 1884c, p. 310. Not *O. flabellula* Lamarck, 1806b, p. 164

See *Cubitostrea divaricata* (Lea).

Ostrea frionis Harris

See *Crassostrea frionis* (Harris)

***Ostrea frithi* Gardner**

Ostreidae

Ostrea frithi Gardner, 1945, p. 82, pl. 2, figs. 7, 9

Range.—Upper Eocene. Upper Jackson gr. (type)

Locality.—TEXAS: Starr Co., oyster bed in SW. corner Antonio Canales Salinas, "Sacatosa" grant, 20 mi. N. Roma (type)
Type.—Holotype, No. 372918 USNM

Ostrea georgiana Conrad

See *Crassostrea gigantissima* (Finch)

***Ostrea gierharti* Gardner**

Ostreidae

Ostrea gierharti Gardner, 1945, p. 78, pl. 2, figs. 1-4

Range.—Middle Eocene. Mount Selman fm. (type), middle Claiborne gr.

Locality.—Mexican side of Rio Grande across from San Ygnacio, Zapata Co., Texas, USGS sta. 12972 (type)

Types.—Syntypes, No. 372916 USNM

Ostrea gigantea ? Vanuxem in Morton, 1828a, p. 69 *nomen nudum*
 [could be error for *gigantissima*]
 See *Crassostrea gigantissima* (Finch)

Ostrea gigantissima Finch

See *Crassostrea gigantissima* (Finch)

Ostrea glandiformis Whitfield

See *Ostrea bryani* Gabb

"*Ostrea*" *glauconoides* Whitfield

Ostreidae

Ostrea glauconoides Whitfield, 1885, p. 222, pl. 29, fig. 2; Dall, 1898b, p. 677 under *O. sellaeformis* Conrad; Whitfield, 1899, p. 162; Harris, 1919, p. 13

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N.J.: Monmouth Co., Shark R. (type). (Cf.) ALA.: Monroe Co., base of Claiborne Bluff, Alabama R.

Type.—Holotype, No. 7840, State Mus., Trenton, N.J.

***Ostrea* (*Ostrea*) *intermedoides* Aldrich**

Ostreidae

Ostrea intermedoides Aldrich, 1921, p. 23, pl. 3, figs. 15, 16

Ostrea sp. cf. *O. intermedoides* Aldrich, Gardner, 1945, p. 77 in part
 See *O. arrosis* Aldrich, 1904, pl. 3, figs. 3, 4 for similarity. Suggestive that this is young of *O. arrosis* Aldrich

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Types.—Syntypes, No. 48 GSATC

Ostrea johnsoni Aldrich

See *Alectryonia johnsoni* (Aldrich)

***Ostrea kochae* Gardner**

Ostreidae

Ostrea kochae Gardner, 1935, p. 140, pl. 8, figs. 1-5

? *Ostrea kochae* Gardner, Rutsch, 1943, p. 152

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Locality.—TEXAS: Medina Co., D'Hanis-Yancey rd., 7½ mi. E. by S. of D'Hanis (type)

Types.—Syntypes (2), No. 370962 USNM

Ostrea lingua-canis LeaSee *Crassostrea alabamiensis* (Lea)*Ostrea* (*Alectryonia* ?) *linguafelis* WhitfieldSee *Cubitostrea* (*Cubitostrea*) *linguafelis* (Whitfield)*Ostrea lisbonensis* HarrisSee *Cubitostrea* () *lisbonensis* (Harris)*Ostrea mauriciensis* [sic] [Gabb], Dall, 1898b, p. 679; *O. mauricensis* Gabb, Dall, 1898b, pp. 684, 687Equals *Ostrea mauricensis* Gabb, Miocene*Ostrea mortoni* Aldrich, 1887 not Gabb, 1862aSee *Gigantostrea trigonalis* (Conrad)*Ostrea mortonii* GabbSee *Alectryonia vicksburgensis mortonii* (Gabb)***Ostrea* (*Ostrea*) *multilirata* Conrad*** **Ostreidae**

Ostrea multilirata Conrad in Emory, 1857, p. 157, pl. 12, figs. 1a-d; Heilprin, 1884c, p. 298, pl. 38, figs. 1, 2 copy Conrad; Schuchert, et al., 1905, p. 471; Gardner, 1926d, pp. 513, 514; Trowbridge, 1932, pl. 34, figs. 1, 2; pl. 35, figs. 1, 2 copies Gardner, 1923, *O. tasex*; Gardner, 1935, p. 141; Barry, 1942+, p. 52, pl. 4, figs. 1-4; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 1

Not *Ostrea georgiana* Conrad, Hilgard in Hopkins, 1871, p. 12 as in Barry, 1942+, p. 52

? *Ostrea crenulimarginata* Gabb, Harris, 1899b, p. 297, pl. 52, figs. 1, 1a fide Barry, 1942+

Ostrea tasex Gardner, 1923, p. 109, pl. 29, figs. 6, 7; pl. 31, figs. 1-4; Howe, 1925, p. 170; Gardner, 1926d, pp. 513, 514

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Indio fm. (type), lower Wilcox [Sabine] gr.

Localities.—"Dry Creek, Mexico", Cretaceous (Conrad, type).

TEXAS: Dimmit Co., $\frac{1}{4}$ mi. NE. of Glass Ranch headquarters (type *O. tasex* Gardner). LA.: Sabine Par., Rocky Springs Church, N. bank of Bayou Dupont in SE. $\frac{1}{4}$, SW. $\frac{1}{4}$, SW. $\frac{1}{4}$, sec. 9, T. 8 N., R. 10 W.; rd. cut along La. Highway 42-D in SW. $\frac{1}{4}$, SE. $\frac{1}{4}$, sec. 25, T. 8 N., R. 12 W.; NE $\frac{1}{4}$ sec. 24, T. 8 N., R. 11 W. (Howe 1925)

Types.—Syntypes, *O. multilirata* No. 9895 USNM. Syntypes, *O. tasex*, No. 352265 USNM

Ostrea multilirata duvali GardnerSee *Ostrea* (*Ostrea*) *duvali* Gardner***Ostrea* (*Ostrea*) *multilirata sabinalensis* Gardner*** **Ostreidae**

Ostrea multilirata sabinalensis Gardner, 1935, p. 142, pl. 9, figs. 1, 2

Range.—Paleocene. Pockets at top Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: Uvalde Co., Schuddemagen ranch, 11 mi. S. of Sabinal (type); S. bank of Elm Cr.

Types.—Syntypes (2), No. 370906 USNM

Ostrea panda Morton in partSee *Alectryonia vicksburgensis mortoni* (Gabb)

Ostrea panda Morton

St. George's, Delaware. Cretaceous

Ostrea pandaeformis GabbSee *Gigantostrea trigonalis* (Conrad)*Ostrea percrassa* Conrad, Dall, 1898b, p. 683 in part. Not Conrad, 1840, p. 50See *Gigantostrea sylvaerupis* (Harris)*Ostrea (Cubitostrea) perplicata* DallSee *Cubitostrea (Cubitostrea) perplicata* (Dall)*Ostrea pincera* [sic] Lea, Dall, 1898b, p. 679See *Crassostrea alabamiensis* (Lea)*Ostrea pincema* [sic] Lea, CossmannSee *Crassostrea alabamiensis* (Lea)*Ostrea pincerna* LeaSee *Crassostrea alabamiensis* (Lea)***Ostrea (Ostrea) podagrina* Dall****Ostreidae**

Ostrea podagrina Dall, 1896b, p. 22; Dall, 1898b, p. 682 "upper Eocene", pl. 30, figs. 5, 6 "Oligocene"; Schuchert, *et al.*, 1905, p. 471; Gardner, 1926a, p. 42 in part, pl. 10, figs. 5, 6 copy Dall, (not Chipola Miocene as stated by Gardner)

? "*Ostrea podagrina* Dall", Cooke, 1945, pp. 62, 64, 68 listed only

Ostrea "podagrina" Dall, Harris, 1951, p. 6 in part, pl. 1, fig. 5 USNM; pl. 2, fig. 1; pl. 2, figs. 2, 3 copy of type

Range.—Middle-upper Eocene (type). Age determined through presence of the larger Foraminifera, *Operculinoides floridensis* (Heilprin) by R. C. Douglass, 1961 (pers. com. D. Wilson).

Localities.—FLA.: Lafayette Co., "W. bank of Suwanee near the Sulphur Spring" (text), "Oligocene of Suwanee River", expl. pl. (type) see also Cooke, 1945, p. 68; cf. *Taylor Co.*, across Steinhatchee R. from Clara, USNM

Type.—Holotype, No. 135127 USNM

Ostrea "podagrina" Dall, Harris, 1951 in partSee also *Ostrea* sp.*Ostrea praecompressirostra* HarrisSee *Ostrea crenulimarginata* Gabb*Ostrea princerna* [sic] Lea, DallSee *Crassostrea alabamiensis* (Lea)***Ostrea (Ostrea) pulaskensis* Harris****Ostreidae**

Gryphaea vomer Morton, Safford, 1869, p. 419 name only, not *Gryphaea vomer* Morton, 1828b, p. 83; Langdon, 1894, p. 416, not of Morton

Gryphaea pitcheri Morton, Hilgard, 1869, p. 29

"*Gryphaea pitcheri* Morton?" White, 1882, p. 137 not *Gryphaea pitcheri* Morton, 1834, p. 55

Ostrea pulaskensis Harris, 1894b, p. 40, pl. 1, figs. 3, 3a-d; Harris, 1896, p. 46, pl. 1, figs. 2, 2a-c, 3, 3a; Dall, 1898b, p. 677; Harris, 1899b, p. 298, pl. 52, figs. 2-4; Schuchert, *et al.*, 1905, p. 472; Veatch, 1906, p. 33, pl. 16, figs. 3, 3a copies Harris, figs. 3b-3e; cf. Maury,

1912, p. 38, pl. 7, fig. 2; Deussen, 1924, p. 43, pl. 14, figs. 3, 3a copies Harris, figs. 3b-e copies Veatch; Cooke, 1926a, p. 256, pl. 93, fig. 6; Semmes, 1929, fig. 51-6; Trowbridge, 1932, p. 35, pl. 30, figs. 3, 4; Gardner, 1935, p. 137, pl. 11, fig. 7; fig. 8 copy Cooke; Brann and Kent, 1960, p. 637; Perrilliat Montoya, 1963, p. 6, pl. 3, figs. 2-4
 ? *Ostrea cf. pulaskensis* Harris, Rutsch, 1943, p. 152

Range.—Paleocene. Clayton fm. lower Midway gr.; Kincaid fm., lower Midway gr.; Porters Creek fm., upper Midway gr. including Sucarnoochee clay and Matthews Ldg. beds: Midway, Arkansas (type)

Localities.—ARK.: *Pulaski Co.*, near Alexander (type); Kings salt works, sec. 35, [T.] 15 N., [R.] 8 W. TENN.: *Hardeman Co.*, Hannah's $1\frac{3}{4}$ mi. N. of Crainesville; Huddleston's $1\frac{3}{4}$ mi. W. of Crainesville; McDonald's mill, 4 mi. SW. of Middleton. MISS.: *Tippah Co.*, $\frac{1}{2}$ mi. S. and 2 mi. E. of Ripley. ALA.: *Wilcox Co.*, $\frac{3}{4}$ mi. W. and 1 mi. N. of Prairie Bluff; 1 mi. N. of Matthews Ldg., Alabama R.; $1\frac{1}{2}$ mi. SW. of Palmer's mill; $\frac{1}{2}$ mi. W. of Graveyard Hill. TEXAS: For localities in Texas—see Gardner, 1935, p. 138

Types.—Syntypes (2), No. 135138 USNM

Ostrea radians Conrad

See *Cubitostrea sellaeformis* (Conrad)

Ostrea sellaeformis Conrad

See *Cubitostrea sellaeformis* (Conrad)

Ostrea sellaeformis Conrad, Renick and Stenzel, 1931 var. 1

See *Cubitostrea (Cubitostrea) petropolitana* Stenzel and Twining

See also *Cubitostrea sellaeformis* Conrad var. 1, Renick and Stenzel, 1931

Ostrea sellaeformis divaricata Lea

See *Cubitostrea (Cubitostrea) divaricata* (Lea)

Ostrea sellaeformis mut. laeta de Gregorio

See *Cubitostrea sellaeformis* (Conrad)

Ostrea sellaeformis lisbonensis Harris

See *Cubitostrea* () *lisbonensis* (Harris)

Ostrea sellaeformis perplicata Dall

See *Cubitostrea (Cubitostrea) perplicata* (Dall)

Ostrea sellaeformis smithvillensis Harris

See *Cubitostrea smithvillensis* (Harris)

Ostrea sellaeformis Mut. vermilli de Gregorio

See *Cubitostrea sellaeformis vermilli* (de Gregorio)

Ostrea semihunata Lea

See *Crassostrea alabamiensis* (Lea)

***Ostrea semmesi* Gardner**

Ostreidae

Ostrea semmesi Gardner, 1945, p. 78, pl. 2, figs. 6, 8

Range.—Middle Eocene. Mount Selman fm., middle Claiborne gr. (type)

Locality.—TEXAS: *Frio Co.*, Goat pens of east side of Yancy rd., 3 mi. N. Moore (type)

Types.—Syntypes, No. 372917, USNM

Ostrea sinuosa Rogers and Rogers**Ostreidae**

- Not *Ostrea compressirostra* Say, 1824b, p. 132, pl. 8, figs. 2a, 2b (reprint 1896, p. 38, pl. 8, figs. 2a, 2b); Conrad in Morton, 1834, p. 2; Rogers and Rogers, 1837, p. 366; H. C. Lea, 1849, p. 103
- Ostrea sinuosa* Rogers and Rogers, 1837, p. 340; Rogers and Rogers, 1839, pl. 27, fig. 1 [2 figs.] reprint, 1884, p. 668, pl. 2, fig. 1 [2 figs.]; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15
- Ostrea bellovacina* Lamarck, Conrad, 1842b, p. 172; H. C. Lea, 1849, p. 103; Conrad, 1865a, p. 15 not Lamarck, 1806a, p. 159
- Ostrea compressirostra* Say, Tuomey, 1842a, p. 156; 1858, pp. 266, 271; Conrad, 1865a, p. 15; Conrad, 1866a, p. 3; Heilprin, 1884b, p. 85; Heilprin, 1884c, p. 309, pl. 65, figs. 1, 2; Aldrich, 1886, pp. 55, 57, 58; de Gregorio, 1890, p. 177, pl. 20 figs. 1, 8 copies Heilprin; Langdon, 1891, p. 603; Cossmann, 1893, p. 19; not Langdon, 1894, p. 413 = *O. crenulimarginata* Gabb, 1860d; Harris, 1894a, p. 302; Clark, 1895, p. 5; Clark, 1896, p. 86 in part, not pl. 37; pl. 38, figs. 1a, b, 2a-c; pl. 39, figs. 1, 2a, b; pl. 40, fig. 1 = *O. spp.*; Harris, 1897b, p. 37, pl. 1 copy Say; pls. 2, 3 copy Heilprin; pl. 6, fig. 1; Dall, 1898b, p. 679 in part; Clark and Martin, 1901, p. 190 in part, not pls. 45, 46, 47 same as Clark, 1896; Newton, 1902, p. 304; Schuchert, *et al.*, 1905, p. 468; Veatch, 1906, pl. 18, fig. 1 copy Heilprin; Brann and Kent, 1960, p. 631; not Vokes, 1961, p. 49, pl. 10, fig. 13 copy Clark, 1896, pl. 38, fig. 1a. Not Perrilliat Montoya, 1963, p. 4 in part, not pl. 2, fig. 1; pl. 4, fig. 1; pl. 5, fig. 1. Not Say, 1824b

Through the courtesy of Axel A. Olsson and C. P. Nuttall, Paleontology Dept. [British Museum (Nat. His.)], in 1964, the types of Thomas Say (1824b) of the species described from the Miocene of Maryland were pointed out to be in the British Museum (Nat. Hist.). See Newton (1902). The specimens had been collected by John Finch, the species described by Say in 1824, and the collection sold by Finch to the British Museum (Natural History) in 1834. Included among the species described by Say was "*Ostrea compressirostra*." All of the species except *O. compressirostra* have been known to be Miocene forms. Say did not designate the age of the species. *O. compressirostra* from 1842 (Tuomey) to the present has been regarded as an Eocene species characteristic of the Eocene of Maryland (Clark and Martin, 1901), Alabama, and Georgia (Harris, 1897b). Although common in the lower Eocene the so-called *O. compressirostra* does not occur in the Midway (Paleocene) of the southern states. We, therefore, doubted the Aquia (Paleocene) distribution of the species in Maryland as indicated by Clark and Martin (1901). In our preliminary work the dilemma was left with a statement that confirmation of the age would be held until the type of *O. compressirostra* Say could be found, examined, and the locality of occurrence could be established.

After examining and photographing Say's types in the British Museum (Natural History) in 1964, Olsson determined the type of *O. compressirostra* Say as *O. disparilis* Conrad, 1840 (per. com., June 12, 1964), the Miocene species. Conrad in Morton, 1834, listed the species as Miocene but later from 1865 on included the species in the Eocene.

In the Finch collection [BM(NH)] of *O. compressirostra* there is a second specimen which was identified by Olsson as Eocene. C. P. Nuttall (per. com., July 1, 1964) of the BM (NH) does not believe that the second specimen in their collection is the one referred to by Say as a specimen presented to the Academy of Natural Sciences at Philadelphia, because it is the wrong valve and the measurements do not tally.

Because the type of *O. compressirostra* Say, 1824, is Miocene and because of the problem of the age of the so-called "*O. compressirostra*", it seems best to retain *O. compressirostra* Say for the Miocene species be-

cause there is a name which may be utilized for the Eocene species. The name *Ostrea sinuosa* was given by Rogers and Rogers in 1837, for the Eocene species from Virginia. This name has heretofore been placed in the synonymy of the so-called "*O. compressirostra* Say". We suggest and use herein *Ostrea sinuosa* Rogers and Rogers, 1837, type locality, Prince George County, Evergreen, James River, lower Eocene, for the lower Eocene species of Virginia, Maryland, and the southern states. Rogers and Rogers in 1837 (pp. 366, 367) recognized *O. compressirostra* Say as the Miocene species as they so stated. They described and named the Eocene form *Ostrea sinuosa* with the remarks (p. 340), "This very beautiful fossil oyster will be seen to differ from the *O. compressirostra* [p. 366 placed *O. compressirostra* in Miocene [sic]] in several essential particulars, . . .". It is clear that Rogers and Rogers knew the distinction between the Eocene and Miocene oysters which had been confused as *O. compressirostra*. Rogers and Rogers gave excellent figures of *O. sinuosa* and a definite type locality, of which Say's description of *O. compressirostra* does not have except "Maryland." Rogers and Rogers types have not been found.

Heilprin (1884b, p. 15 footnote) called attention to Rogers and Rogers crediting *O. compressirostra* to the Miocene and the resemblance to *O. disparilis*. Heilprin noted in the Academy the presence of the specimen mentioned by Say from near "Alexandria, right bank of Potomac."

Some later authors have identified *O. compressirostra* as a Miocene species (Dall, 1903 in part; Richards, 1950; DuBar and Solliday, 1961) so that not only does the literature include the confused Eocene age but does contain the true Miocene determinations.

Our recommendation as a result of an analysis of the complicated history of *O. compressirostra* is: (1) *Ostrea compressirostra* Say, 1824, stand for the Miocene species which its type represents, and the specimen Reg. No. L13204 in the British Museum (Nat. Hist.) be selected as the lectotype. The name *O. disparilis* Conrad 1840, or other later specific names which are equivalent will fall in the synonymy of *O. compressirostra* Say; (2) *O. sinuosa* Rogers and Rogers, 1837, be used for the Eocene species which has commonly been called "*O. compressirostra* Say."

The specimen which Say stated in his original description that had been given by Mr. Z. Collins to the Academy of Natural Sciences at Philadelphia, from "west branch of the Potomac, fifteen miles below Alexandria" is in the Academy of Natural Sciences (per. com. H. G. Richards, July 27, 1964). It is the specimen presented by Mr. Collins and is from below Alexandria, Va. "according to a label pasted on the shell." Because the name *O. sinuosa* Rogers and Rogers is available for the Eocene *Ostrea*, it is not necessary to give a new name to that specimen of Say.

The authors are indebted to C. P. Nuttall and Axel A. Olsson for information regarding Say's types in the BM(NH) and opinions regarding the same.

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: Prince George Co., Evergreen, James R. (type).

MD.: See Clark and Martin (1901) except for Aquia formation localities. ALA. and GA.: See Harris, 1897b, p. 38

Type.—Presumably lost. Possibly MCZ

Ostrea (Cubiotrea) smithvillensis Harris

See *Cubitostrea* () *smithvillensis* (Harris)

"*Ostrea (Gryphocostrea) subversa* Conrad" *nomen nudum*

Ostrea (Gryphocostrea) subversa Conrad, 1865a, p. 15, p. 190+ as

Gryphaeostrea [corrected spelling] *nomen nudum*. Identified as probably "*Ostrea eversa* [Melleville] Deshayes". [Thanetian, France]

Gryphostrea "*eversa* (Deshayes)", Conrad, 1866a, p. 3 Md. & Miss.

Ostrea eversa "Mellville" sp., Heilprin, 1884c, p. 310 in part, not pl. 64, figs. 5-8 copy Deshayes

"*Ostrea subeversa* Conrad", Clark, 1896, p. 93 not described. Species not found by Clark.

Ostrea (*Gryphaeostrea*) *subeversa* Conrad, Dall, 1898b, p. 672 in part. Description of subgenus. Not Kellum, 1926, p. 18; Stenzel, 1947, p. 175 *nomen nudum*.

Discussion of nomenclature of *Gryphaeostrea* Conrad, 1865a, and type species "*O. eversa* [Melleville, 1843, p. 87] Deshayes" 1864 [1861], pp. 99, 100

O. subeversa was never described or figured by Conrad so that it remains a *nomen nudum* as of Conrad. If the name needs to have status it could possibly date from Dall who gave a description of *Gryphaeostrea* Conrad using "*O. subeversa* Conrad=*O. eversa* (Mellv. ?) Conrad + ? *O. vomer* Morton" as type species. But Dall could not have used the characters of "*O. subeversa*" for the generic description because as yet no one knows what *O. subeversa* is. The name best be eliminated from the literature. *Gryphaea eversa* (not *Ostrea*) was described by Melleville, 1843, p. 87

Range.—Eocene.

Locality.—MD.: "U. Marlboro", Conrad, 1865a

Types.—Specimens (2), No. 30714 ANSP Moore, 1862, p. 99

Ostrea (*Gryphaeostrea*) *subeversa* Conrad, Dall, 1898b in part

See *Gryphaeostrea vomer* (Morton)

Ostrea sylvaerupis Harris

See *Gigantostrea sylvaerupis* (Harris)

Ostrea tasex Gardner

See *Ostrea multilirata* Conrad

***Ostrea tecticosta* Gabb**

Ostreidae

Ostrea tecticosta Gabb, 1860d, p. 403, pl. 68, figs. 47, 48; Whitfield, 1885, p. 33, pl. 3, figs. 1, 2 type; Weller, 1907, p. 443, pl. 43, figs. 17, 18; figs. 19 type; Richards, 1958, p. 107, pl. 16, figs. 13, 14 (type) see for synonymy, description, and localities

Range.—Upper Cretaceous (type). Paleocene. Hornerstown fm.

Localities.—N.J.: (type); Monmouth Co., Marlboro (Weller);

Gloucester Co., Harrisonville (Richards). Tenn. (type)

Types.—Syntypes (N.J.), No. 18761; (Tenn.), No. 18808 ANSP

Ostrea thirsae (Gabb)

See *Odontogryphaea thirsae* (Gabb)

Ostrea trigonalis Conrad

See *Gigantostrea trigonalis* (Conrad)

Ostrea trigonalis sylvaerupis Harris

See *Gigantostrea sylvaerupis* (Harris)

Ostrea tumidula Aldrich, 1894b

See *O. crenulimarginata* Gabb [*vide* Harris, 1896, p. 45]

Ostrea tuomeyi Conrad, 1865g

See *Gigantostrea trigonalis* (Conrad)

Ostrea vicksburgensis Conrad

See *Alectryonia vicksburgensis* (Conrad) variations

Ostrea vicksburgensis ludoviciana Harris

See *Alectryonia ludoviciana* (Harris)

Ostrea vicksburgensis mortoni Gabb

See *Alectryonia vicksburgensis mortoni* (Gabb)

Ostrea (Gryphaeostrea) vomer (Morton)

See *Gryphaeostrea vomer* (Morton)

Ostrea (Gryphaeostrea) vomer (Morton), Clark and Martin

See *Ostrea* spp.

***Ostrea* sp.**

Ostreidae

Gryphaea vesicularis (Lamarck), Clark and Martin, 1901, p. 193, pl. 50, figs. 6, 6a. Not *Ostrea vesicularis* Lamarck, 1806b, p. 160

Range.—? Paleocene. Aquia fm. or derived from Cretaceous

Locality.—MD.: Charles Co., Clifton Beach

Type.—Figured specimen, USNM

***Ostrea* sp.**

Ostreidae

Gryphaea vesicularis Lamarck, Whitfield, 1885, p. 224, pl. 29, figs. 7, 8; Whitfield, 1899, p. 158. Not *O. vesicularis* Lamarck, 1806b, p. 160

Range.—Middle Eocene. Shark R. ml., upper Claiborne gr.

Locality.—N.J.: Monmouth Co., Shark R.

Type.—Figured specimen, No. 7832, State Mus. Trenton, N.J.

***Ostrea* sp.**

Ostreidae

Ostrea compressirostra Say, Clark, 1895, p. 5 in part; Clark, 1896, p. 86 in part, pl. 37; pl. 38, figs. 1a, b, 2a-c, pl. 39, fig. 1; Dall, 1898b, p. 679 in part; Clark and Martin, 1901, p. 190 in part, pls. 45, 46, 47; Vokes, 1961, p. 49, pl. 10, fig. 13 copy Clark, 1896, pl. 38, fig. 1a. Not *O. compressirostra* Say, 1824b

Range.—Paleocene. Aquia fm.

Localities.—MD.: See Clark and Martin, 1901

Types.—Figured specimens probably USNM

***Ostrea* sp.**

Ostreidae

Ostrea cretacea Morton, Aldrich, 1886, p. 43; Aldrich, 1895b, p. 16 not pl. 5, fig. 10

Range.—Upper Eocene. Jackson gr.

Locality.—ALA.: Clarke Co., "The Rocks"

Type.—Unfigured specimen, unknown

Ostrea sp.**Ostreidae**

Ostrea cretacea Morton, Aldrich, 1895b, p. 16 in part, pl. 5, fig. 10

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R. [label with specimen]

Type.—Figured specimen, No. 638956 USNM

Ostrea sp.**Ostreidae**

Ostrea compressirostra Say, Clark, 1895, p. 5; Clark, 1896, p. 86 in part, pl. 39, figs. 2a, 2b

Ostrea (Gryphaeostrea) vomer (Morton), Clark and Martin, 1901, p. 193, pl. 50, figs. 2, 3

Range.—Paleocene. Aquia fm.

Locality.—MD. or VA.

Type.—Figured specimen, USNM

Ostrea sp.**Ostreidae**

Ostrea "podagrina" Dall, Harris, 1951, p. 7 in part, pl. 1, figs. 3, 4 probably not *O. podagrina* Dall, 1896b which see; Brann and Kent, 1960, p. 637

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: Marion Co., Ocala Lime Rock Corp., E. of Kendrick

Type.—Figured specimen, No. 24436, PRI

Ostrea sp.**Ostreidae**

Ostrea sp. Barry, 1942+, p. 55

Range.—Paleocene. "Logansport fm.", (name preoccupied) middle Midway gr.

Locality.—LA.: Natchitoches Par., rd. cut in NW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 33, T. 10 N., R. 10 W. along dirt rd. leading west from Louisiana Highway 404

Type.—Unfigured specimen, No. 5090 LSU Pal. Mus.

Ostrea sp.**Ostreidae**

Ostrea sp., Barry, 1942+, p. 52, pl. 3, figs. 4, 5

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

Types.—Figured specimens, presumably LSU Pal. Mus.

Ostrea sp.**Ostreidae**

Ostrea sp. Clark, 1895, p. 6; Clark, 1896, p. 88, pl. 38, fig. 3

Ostrea (Gryphaeostrea) vomer (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, fig. 5 same as Clark, 1896, pl. 38, fig. 3

Range.—Paleocene. Aquia fm.

Locality.—MD.: Charles Co., Clifton Beach

Type.—Figured specimen, USNM

Ostrea sp.**Ostreidae**

Ostrea sp. Clark, 1895, p. 6; Clark, 1896, p. 88, pl. 39, figs. 3a-c
Ostrea (Gryphacostrea) vomer (Morton), Clark and Martin, 1901, p. 193 in part, pl. 50, figs. 1-1b same as Clark, 1896, pl. 39, figs. 3a-c

Range.—Paleocene. Aquia fm.

Locality.—MD.: Charles Co., Glymont

Type.—Figured specimen, USNM

Ostrea sp.**Ostreidae**

Ostrea sp. Gardner, 1935, p. 138

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Caldwell Co., 5½ mi. N. Lockhart, (USGS 11707)

Type.—Unfigured specimen not found USNM, 1962

Ostrea sp.**Ostreidae**

Ostrea sp. Gardner, 1935, p. 143

Range.—Paleocene. Kincaid fm., lower Midway gr.

Localities.—TEXAS: Medina Co., USGS Sta. 6281, Hondo Creek, left bank, ¼ mi. above road crossing due E. of Elstone; USGS Sta. 6280, loose boulder, bed of Hondo Creek, ⅛ mi. below road crossing due E. of Elstone

Types.—Unfigured specimens probably USNM

Ostrea spp.**Ostreidae**

Ostrea spp. Richards, 1948, p. 2, pl. 2, figs. 16, 17

Range.—Middle Eocene. (? Claiborne)

Locality.—N.C.: Johnston Co., about 3 mi. W. of Clayton

Types.—Figured specimens, probably ANSP

Ostrea sp.**Ostreidae**

Ostrea sp. Richards and Palmer, 1953, p. 45, pl. 9, fig. 6

Range.—Upper Eocene. Inglis fm., lower Ocala gr.

Locality.—FLA.: Levy Co., road metal pit 2.9 mi. S. of N. limits of Gulf Hammock just SW. of State Road 55 in SW. ¼ sec. 34, T. 14 S., R. 16 E.

Type.—Figured specimen, No. I-7595 Fla. Geol. Sur.

Ostrea sp.**Ostreidae**

Ostrea sp. Weller, 1907, [no p.] pl. 42, fig. 14

Range.—Lower Eocene. Vincentown fm.

Locality.—N.J.: Monmouth Co., near Deal

Type.—Figured specimen unknown

Ostrenomia carolinensis Conrad**Plicatulidae**

Ostrenomia carolinensis Conrad, 1872b, p. 216, pl. 7, fig. 3 [3 specimens figured interior and exterior] "Eocene of North Carolina"; Tryon, 1884b, p. 295, pl. 133, figs. 29, 30; Dall, 1898b, pp. 761, 764=
Plicatula

Range.—Eocene

Locality.—"N.C." (type)

Type.—Not found ANSP by Moore, 1962

Pachecoia (Pachecoia) adamsi (Palmer)**Noetiidae**

Trinacria adamsi Palmer in Price and Palmer, 1928, p. 25, pl. 7, figs. 1, 2, 5; Brann and Kent, 1960, p. 875

Pachecoia (Pachecoia) adamsi (Palmer), Stenzel, Krause, and Twining, 1957, p. 68, pl. 6, figs. 10, 11

Range.—Middle Eocene. Queen City fm. (type), lower Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, mouth of Gazley Creek, Colorado R., Smithville (Bur. Ec. Geol. loc. No. 11-T-38) (type)

Types.—Holotype, No. 349; paratypes, Nos. 347, 348 PRI

Pachecoia (Pachecoia) cainei Harris**Noetiidae**

Trinacria (Pachecoia) cainei Harris, 1919, p. 46, pl. 20, figs. 3, 3a; Brann and Kent, 1960, p. 875

Pachecoia (Pachecoia) cainei Harris, Stenzel, Krause, and Twining, 1957, p. 62, pl. 6, figs. 1-4

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: *Orangeburg Co.*, 3-6 miles WNW. of Orangeburg (type)

Type.—Holotype, No. 525 PRI

Pachecoia (Pachecoia) catonis Stenzel and Twining**Noetiidae**

Pachecoia (Pachecoia) catonis Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 68, pl. 6, figs. 12-14

Range.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

Locality.—ALA.: *Covington Co.*, Catons Bluff, left bank Conecuh R., sec. 14, T. 4 N., R. 14 E., 3 mi. WNW. of Andalusia (type)

Types.—Holotype, No. 20721 BEG; unfigured paratypes (6), No. 20722 BEG

Pachecoia corvamnisi (Harris)**Noetiidae**

Trinacria corvamnisi Harris in Harris and Palmer, 1946, p. 53, pl. 13, figs. 3, 4; Brann and Kent, 1960, p. 875

Pachecoia ? corvamnisi (Harris), Stenzel, Krause, and Twining, 1957, p. 70

Range.—Upper Eocene. Upper Jackson gr. (type)

Locality.—ARK.: *St. Francis Co.*, Crow Creek, 2 mi. E. of Forrest City (type)

Type.—Holotype, No. 4218 PRI

Pachecoia (Pachecoia) decisa (Conrad)**Noetiidae**

Pectunculus decisus Conrad, 1833c, p. 39 (Harris reprint 1893, p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 14

Limopsis decisus (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 16; Conrad, 1865a, p. 12 in part; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 192, pl. 23, fig. 28a copy Conrad (not pl. 25 as in text)

Trinacria decisa (Conrad), Cossmann, 1893, p. 16, pl. 1, figs. 17, 18; Harris, 1919, p. 41 in part, pl. 18, fig. 17 copy Conrad=Claiborne sand (not pl. 19, figs. 1, 2 var.; not pl. 18, figs. 18, 19)

Trigonoarca [sic] decisa (Conrad), Dall, 1898b, p. 606

Halonanus decius (Conrad), Stewart, 1930, p. 78; MacNeil, 1937, p. 457

Trigonodesma decisa (Conrad), Reinhart, 1935, p. 53

Pachecoa (*Pachecoa*) *decisa* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69 includes "var." *abbreviata* Harris

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (2), No. 30539 ANSP, Moore, 1962, p. 52

***Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."**

Noetiidae

Trigonoarca [sic] *decisa* (Conrad) var. Clark and Martin, 1901, p. 195, pl. 51, figs. 5, 5a

Range.—Lower Eocene. Nanjemoy fm.

Locality.—VA.: King George Co., Woodstock

Type.—Figured specimen, USNM

***Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."**

Noetiidae

Cf. *Limopsis declivis* (Conrad), de Gregorio, 1890, pl. 23, figs. 15-19 ? Gosport sd. possibly from base of bluff

Trinacria decisa (Conrad) var. Harris, 1919, p. 41 in part, pl. 19, figs. 1, 2; Brann and Kent, 1960, p. 876. Nos. 507, 508 add "var."

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Localities.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R.; Lisbon Bluff, Alabama R. Cf. TEXAS: Robertson Co.,

Cedar Cr. Wheelock league; *Bastrop Co.*, Colorado R. at Smithville; Brazos R. 500 yds. below mouth of Little Brazos R. Cf.

LA.: Lincoln Par., Ruston well (Harris localities)

Types.—Figured specimens, Nos. 507, 508 PRI

***Pachecoa* (*Pachecoa*) *decisa abbreviata* (Harris)**

Noetiidae

Trinacria decisa "var." *abbreviata* Harris, 1919, p. 42, pl. 18, fig. 19; Brann and Kent, 1960, p. 876

Pachecoa (*Pachecoa*) *decisa* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69 included in *P. decisa* (Conrad)

This form, as well as "*T. carolina* Harris, may prove to be a variation.

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Orangeburg Co., 6 mi. WNW. of Orangeburg (type)

Type.—Holotype, No. 506 PRI

***Pachecoa* (*Pachecoa*) *declivis* (Conrad)**

Noetiidae

Pectunculus declivis Conrad, 1833c, p. 39 (Harris reprint 1893, p. 65); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 includes *P. minor* Lea; Harris, 1895b, p. 15

Limopsis declivis (Conrad), Conrad, 1860, p. 297, pl. 47, fig. 13; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 191, pl. 23, figs. 21-23; fig. 24 copy Conrad (not figs. 15-19 see "*Trinacria decisa* Conrad", Harris, 1919, pl. 19, figs. 1, 2 base of Bluff, Claiborne)

Trigonoarca [sic] *declivis* (Conrad), Dall, 1898b, p. 606

Trinacria declivis (Conrad), Cossmann, 1893, p. 16; Harris, 1919, p. 42, pl. 19, figs. 3-6; Brann and Kent, 1960, p. 876; not *T. declivis* Renick and Stenzel, 1931, p. 104 [= *P. sabinica* (Harris)]

Halonanus declivis (Conrad), Stewart, 1930, p. 78; Gardner, 1945, p. 52, pl. 1, fig. 11? (Mexico)

Pachecoa (*Pachecoa*) *declivis* (Conrad), Stenzel, Krause, and Twining, 1957, p. 69

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris). MISS.: *Clarke Co.*, Wautubbee (Harris)

Type.—Probable holotype, No. 30514 ANSP, Moore, 1962, p. 53

***Pachecoa* (*Stenzelia*) *ellipsis* (Lea)**

Noetiidae

Pectunculus ellipsis, Lea, 1833, p. 78, pl. 3, fig. 56; H. C. Lea, 1849, p. 104; Harris, 1895b, p. 18

Limopsis ellipsis (Lea), Conrad, 1860, p. 207, pl. 47, fig. 9; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; Heilprin, 1884b, p. 88; de Gregorio, 1890, p. 192 in part, pl. 23, fig. 26 copy Lea; fig. 27 copy Conrad; Cossmann, 1893, p. 16

Trigonoarca [*sic*] *ellipsis* (Lea), Dall, 1898b, p. 606; Harris, 1919, p. 44, pl. 19, figs. 12-15; Brann and Kent, 1960, pp. 876, 877

Halonanus ellipsis (Lea), Stewart, 1930, p. 78

Halonanus (*Trinacriella*) *ellipsis* (Lea), MacNeil, 1937, p. 456

Pachecoa (*Stenzelia*) *ellipsis* (Lea), Stenzel, Krause, and Twining, 1957, p. 70

Range.—Middle Eocene. Cook Mt. fm. upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type); Lisbon Bluff, Alabama R. (Harris). LA.: *Lincoln Par.*, Ruston, well depth 1200 ft. (Harris). S. C.: *Orangeburg Co.*, 6 mi. WNW. Orangeburg (Harris)

Type.—Holotype, presumably No. 5357 ANSP

***Pachecoa* (*Pachecoa* ?) *ledoides* (Meyer)**

Noetiidae

Trigonocoelia ledoides Meyer, 1886b, p. 79, pl. 1, fig. 20

Limopsis (*Trigonocoelia*) *ledoides* Meyer, de Gregorio, 1890, p. 191, pl. 23, fig. 25 copy Meyer

Trinacria ledoides (Meyer), Dall, 1898b, p. 604 *ledoides*; Cossmann, 1893, p. 15; Harris, 1919, p. 38, pl. 18, figs. 10, 10a; Brann and Kent, 1960, p. 877

Pachecoa (*Pachecoa* ?) *ledoides* (Meyer), Stenzel, Krause, and Twining, 1957, p. 70

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Claiborne, Alabama R. (type). S. C.: *Orangeburg Co.*, 3 and 6 mi. WNW. of Orangeburg (Harris)

Type.—Holotype, No. 638844 USNM

Pachecoia lisbonensis (Harris)**Noetiidae**

Trinacria ellipsis lisbonensis Harris, 1919, p. 45, pl. 19, figs. 16, 17; Brann and Kent, 1960, p. 877

Pachecoia ? (subgenus ?) *lisbonensis* Harris, Stenzel, Krause, and Twining, 1957, p. 69

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type)

Types.—Syntypes, No. 522 PRI (one syntype lost prior 1937)

Pachecoia (Pachecoia) microcancellata (Barry)**Noetiidae**

Not *Limopsis pulcher* (Gabb), Heilprin, 1891a, p. 403 as in Harris, 1897b, p. 48

Trigonarca pulchra (Gabb) var. Harris, 1897b, p. 48, pl. 8, figs. 2, 2a; Brann and Kent, 1960, pp. 871, 872

Trinacria microcancellata Barry, 1942+, p. 48, pl. 2, figs. 15-18; Wasem and Wilbert, 1943, p. 192

Pachecoia (Pachecoia) microcancellata (Barry), Stenzel, Krause, and Twining, 1957, p. 68

Range.—Lower Eocene. Sabinetown fm. (type), upper Wilcox [Sabine gr.]; Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—TEXAS: Sabine Co., bluff ¼ mi. downstream from Sabinetown Ferry Ldg., Sabine R. (type). Cf. ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.; Clarke Co., Woods Bluff, Tombigbee R.

Types.—Syntypes, Nos. 5077, 5077-A LSU Pal. Mus.

Pachecoia ovalis (Harris)**Noetiidae**

Trinacria ovalis Harris, 1919, p. 43, pl. 19, figs. 9, 9a; Brann and Kent, 1960, p. 877

Pachecoia (Subgenus ?) ovalis (Harris), Stenzel, Krause, and Twining, 1957, p. 69

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 515 PRI

Pachecoia ? (Pachecoia ?) pectuncularis (Lea)**Noetiidae**

Nucula pectuncularis Lea, 1833, p. 81, pl. 3, fig. 60; H. C. Lea, 1849, p. 102; Tuomey, 1858, pp. 266, 274; Harris, 1895b, p. 14 (under *decisus*), p. 33; Schenck, 1934, p. 52

Limopsis pectuncularis (Lea), Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 191, pl. 23, fig. 20 copy Lea

Arca pectuncularis (Lea), Cossmann, 1893, p. 17

Trinacria pectuncularis (Lea), Dall, 1898b, pp. 577, 604, 607; Harris, 1919, p. 42, pl. 19, figs. 7, 7a, 8, 8a; Stewart, 1930, p. 82 possibly *Trinacria*; MacNeil, 1937, p. 456, fig. 1f; Brann and Kent, 1960, p. 877

Pachecoia ? (Pachecoia ?) pectuncularis (Lea), Stenzel, Krause, and Twining, 1957, p. 70

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5404? ANSP [*vide* Harris, 1919, p. 43]

Pachecoa (Stenzelia) perplana (Conrad) Pl. 3, figs. 9, 10 **Noetiidae**

Pectunculus perplanus Conrad, 1834, p. 134; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389 *perplanatus*; Conrad, 1860, p. 297, pl. 47, fig. 16; Harris, 1895b, p. 34

Limopsis perplanus (Conrad), Conrad, 1865a, p. 12 not in "Foss. Shells of Tert. p. 40" nor "J. A. N. Sciences, IV, p. 297, t. 47, f. 16" as stated by Conrad (fig. 16=*P. decisa* Conrad); Conrad, 1866a, p. 4; de Gregorio, 1890, p. 193 sp. dub.; Cossmann, 1893, p. 16, pl. 1, figs. 20, 21 as *perplana*

Trigonoarca [sic] *perplana* (Conrad), Dall, 1898b, p. 606

Trinacria perplana (Conrad), Harris, 1919, p. 43, pl. 19, figs. 10, 10a, 11; Brann and Kent, 1960, p. 877

Halonanus perplanus (Conrad), Stewart, 1930, p. 78

Halonanus (*Trinacriella*) *perplanus* (Conrad), MacNeil, 1937, p. 456, fig. 1h

Pachecoa (*Stenzelia*) *perplana* (Conrad), MacNeil, 1954, p. 217; Stenzel, Krause, and Twining, 1957, pp. 64, 70 [suggested might be same as *P. ellipsis* Lea]

The figures illustrated herein are the syntypes figured for the first time. Through the courtesy of H. G. Richards, ANSP, the types were made available for study and illustration. The present two syntypes are pasted on a card from which a third was fastened but is now unglued and lost. The left valve or smaller specimen is worn and only on the posterior faint microscopic radials show. Concentrics may be observed under a lens on the lower surface of the valve. The posterior dorsal surface of the right valve has a broken jagged edge which may suggest that the dorsal line is straighter than it was.

The left syntype has been compared with the specimen figured by Harris, 1919. They represent the same species.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes (2), No. 30596 ANSP, Moore, 1962, p. 87

Pachecoa (Pachecoa) pulchra (Gabb)**Noetiidae**

Noetia pulchra Gabb, 1860d, p. 388, pl. 67, figs. 55, 55a. Not *Arca pulchra* J. de C. Sowerby, 1824, p. 115, pl. 473, fig. 3

Limopsis decisa (Conrad), Conrad, 1865a, p. 12 in part

Limopsis pulcher (Gabb), Heilprin, 1891a, p. 403

Trinacria pulchra (Gabb), Harris, 1919, p. 40 in part; not pl. 18, fig. 14 "var." nor pl. 18, figs. 11-13 (= *Pachecoa smithvillensis* Stenzel and Twining); Deussen, 1924, p. 67; Renick and Stenzel, 1931, p. 104

Halonanus pulcher (Gabb), Stewart, 1930, p. 78 (type species); MacNeil, 1937, p. 456, fig. 1i; Gardner, 1945, p. 51 in part as *pulchrus*

Trigonodesma pulchra (Gabb), Reinhart, 1935, p. 53

Halonanus pulcher (Gabb), Reinhart, 1943, p. 79 in part not pl. 2, figs 16-18=*P. sabinica* (Harris)

Pachecoa (*Pachecoa*) *pulchra* (Gabb), Stenzel, Krause, and Twining, 1957, p. 65, pl. 6, figs. 5, 6 lectotype designated

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: (Gabb) Burtleson Co., Stone City Bluff, Brazos R. (presumably type), *fide* Stenzel, Krause, and Twining, 1957, p. 11

Types.—No. 13261 ANSP contained 4 specimens. The specimen illustrated by Gabb, 1860d and designated by Stenzel, *et al.*, 1957 as lectotype is missing *fide* Stenzel, *et al.*

Pachecoia (Pachecoia) pulchra (Gabb) variations **Noetiidae**

Trinacria pulchra (Gabb), Harris, 1919, p. 40 in part, pl. 18, fig. 14 (only); Brann and Kent, 1960, p. 878, No. 502 only

Range.—Middle Eocene. Middle to upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R.; Devil's Eye; Little Brazos R. near Mosley's Ferry; well at College Station; *Robertson Co.*, Wheelock; Cedar Cr.; Campbell Cr., Gifford Headright; *Cherokee Co.*, Berryman place, Kimble head-right; *Lee Co.*, Orell's Crossing, Elm Cr.; *Gonzales Co.* 1 mi. S. from Nevilles; *Anderson Co.*, 3 mi. S. of Palestine; *Frio Co.*, Anderson's Ranch. LA.: *Lincoln Par.*, Chautauqua; *Ouachita Par.*, deep well Monroe, S.C.: *Orangeburg Co.*, Orangeburg

Type.—Figured specimen, No. 502 PRI

Pachecoia (Pachecoia) sabinica (Harris) **Noetiidae**

Trinacria pulchra var. *sabinica* Harris, 1919, p. 41, pl. 18, figs. 15, 16; Brann and Kent, 1960, p. 878

Trinacria declivis (Conrad) Renick and Stenzel, 1931, p. 104

Halonautes pulcher (Gabb), Reinhart, 1943, p. 79 in part, pl. 2, figs. 16-18

Pachecoia (Pachecoia) sabinica (Harris), Stenzel, Krause, and Twining, 1957, p. 66, pl. 6, figs. 17-20

Pachecoia sabinica (Harris), Brann and Kent, 1960, p. 646 lectotype designated

Range.—Middle Eocene. Stone City fm. (type), middle Claiborne gr.

Localities.—TEXAS: *Sabine Co.*, right bank Sabine R. [Bur. Ec. Geol. loc. No. 201-T-15] (type). See Stenzel, Krause, and Twining, 1957, p. 66 and Veatch, 1902, p. 129

Types.—Lectotype, No. 504; paralectotype, No. 503 PRI

Pachecoia (Pachecoia) smithvillensis Stenzel and Twining **Noetiidae**

Trinacria pulchra (Gabb), Harris, 1919, p. 40 in part, pl. 18, figs. 11-13 [not pl. 18, fig. 14—"var."]; Deussen, 1924, p. 67 [those listed under "N"]; Renick and Stenzel, 1931, p. 103 (not p. 104); Brann and Kent, 1960, pp. 877, 878

Pachecoia (Pachecoia) smithvillensis Stenzel and Twining, *in* Stenzel, Krause, and Twining, 1957, p. 67, pl. 6, figs. 7-9

Pachecoia smithvillensis Stenzel and Twining, Brann and Kent, 1960, p. 646

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R., (type)

Types.—Holotype, No. 20706 BEG (figs. 8, 9); paratype, No. 20707 BEG (fig. 7), unfigured paratypes, Nos. 20733, 20795, 20796 BEG

Pallium anatifes (Morton)

See *Flexopecten anatifes* (Morton)

*Panopaea*See *Panopea**Panopaea* sp. Aldrich, 1886See *Panopea alabama* (Harris)*Panope*See *Panopea****Panopea alabama* (Harris)****Saxicavidae***Panopaea* sp. Aldrich, 1886, p. 58*Panopaea porrectoides* Aldrich "var.", Harris, 1897a, p. 478, pl. 22, fig. 4*Glycymeris alabama* Harris, 1897b, p. 69, pl. 13, fig. 16 same as 1897a, pl. 22, fig. 4*Panopea alabama* (Harris), Dall, 1898b, p. 828; Harris and Palmer, 1946, p. 119*Range*.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.*Localities*.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type).

GA.: Clay Co., Fort Gaines

Type.—Holotype, No. 6371 ANSP***Panopea bellsensis* Aldrich****Saxicavidae***Panopea bellsensis* Aldrich, 1921, p. 22, pl. 3, figs. 10, 11*Range*.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.*Locality*.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)*Type*.—Holotype, No. 43 GSATC***Panopea elliptica* Whitfield****Saxicavidae***Panopea elliptica* Whitfield, 1885, p. 219, pl. 28, figs. 24, 25; Whitfield, 1899, p. 162; Weller, 1907, p. 647, pl. 73, figs. 1, 2*Range*.—Lower Eocene. Manasquan fm. (type)*Localities*.—N.J.: Ocean Co., New Egypt (type); Medford*Type*.—Holotype, No. 7463, State Mus., Trenton, N.J.***Panopea elongata* Conrad****Saxicavidae***Panopaea elongata* Conrad, 1835b, p. 339, pl. 13, fig. 1; Conrad, 1846b, p. 215, pl. 1, fig. 2 (not pl. 2 as in text); H. C. Lea, 1849, p. 103;

Clark, 1895, p. 5; Clark, 1896, p. 75, pl. 19, figs. 1a-c

Not *Panopea elongata* Roemer, 1836, p. 126*Glycymeris elongata* (Conrad), Conrad, 1854, p. 29; Conrad, 1865a, p. 2; Conrad, 1866a, p. 8*Panopea elongata* Conrad, Dall, 1898b, p. 828; Clark and Martin, 1901, p. 162, pl. 31, figs. 1-5*Range*.—Paleocene. Aquia fm. (type)*Localities*.—MD.: Prince Georges Co., "Piscataway" (Conrad) (type); Fort Washington; Upper Marlboro; Tinkers Cr., 1 mi. N. of Piscataway; 1 mi. NE. of Piscataway; RR. cut near Seat Pleasant; Charles Co., Marshall Hall; 1 mi. SE. of Mason; Clifton Beach; Glymont; Ann Arundel Co., Winchester; Queen Annes Co., Rolphs Ldg., Chester R. VA.: Stafford Co., Aquia

Cr.; Potomac Cr.; *King George Co.*, Paspotansa Cr.; 2 mi. below Potomac Cr.
Type.—Missing, ANSP, Moore, 1962, p. 58

***Panopea oblongata* Conrad**

Saxicavidae

Panopaea oblongata Conrad, 1848a, p. 290; Conrad, 1848b, p. 121, pl. 13, fig. 12; H. C. Lea, 1849, p. 103
Glycimeris elongata Conrad, 1854, p. 29 duplicate *elongata* could be for *oblongata*
Panopea oblongata Conrad, Dall, 1898b, p. 828; Brann and Kent, 1960, p. 649
Panope oblongata Conrad, Harris and Palmer, 1946, p. 119, pl. 25, fig. 6 *Panopea*; Harris, 1951, p. 25 see *Panopea* sp.

Range.—Vicksburg Oligocene (type). Harris figured specimens from the Jackson Eocene which can be compared with the Vicksburg species.

Localities.—MISS.: *Warren Co.*, Vicksburg (type); cf. *Hinds Co.*, Town Creek, Jackson

Type.—Holotype not found *fide* Harris and Palmer, 1946, p. 119; probable holotype, No. 30643 ANSP, Moore, 1962, p. 81

***Panopea porrectoides* Aldrich**

Saxicavidae

Panopea porrectoides Aldrich, 1886, p. 37 *Panopaea*, pl. 4, fig. 3; Dall, 1898b, p. 828; Harris, 1919, p. 194, error in Harris, read *P. porrecta* for *P. porrectoides* in copy of Aldrich, pl. 59, fig. 1 copy Aldrich; Harris and Palmer, 1946, p. 119
Glycimeris porrectoides (Aldrich), de Gregorio, 1890, p. 235, pl. 38, fig. 28 copy Aldrich; Cossmann, 1893, p. 6

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Washington Co.*, "Baker's Bluff [Gopher Hill] Ferr. Sand bed" (type) Aldrich [Holotype labelled St. Stephen's Bluff], Tombigbee R.

Type.—Holotype, No. 638795 USNM

Panopea porrectoides Aldrich "var."

See *Panopea alabama* (Harris)

***Panopea* sp.**

Saxicavidae

Panope oblongata Conrad, Harris, 1951, p. 25, pl. 13, figs. 6, 7?, 8 not Conrad, 1848a, p. 290

Range.—Upper Eocene. "Ocala 1s.", Ocala gr.

Localities.—GA.: *Houston Co.*, Georgia Lime Rock Quarry about 4 mi. from Perry; Clinchfield

Types.—Figured specimens, Nos. 24523-24525 PRI [not in Brann and Kent, 1960]

***Parapholas kneiskerni* Whitfield**

Pholadidae

Parapholas Kneiskerni Whitfield, 1885, p. 241, pl. 30, figs. 22-24; Dall, 1898b, p. 820; Whitfield, 1899, p. 162

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, Trenton, N.J. Whitfield, 1899. Not found, 1962

Cf. *Parmicorbula gibbosa* (Lea)**Corbulidae**

Corbula oniscus Conrad, Conrad, 1846c, p. 398 in part, pl. 4, fig. 3; H. C. Lea, 1949, p. 98 in part; Tuomey, 1858, pp. 265, 273 in part; Conrad, 1865a, p. 3 in part; Conrad, 1866a, p. 8 in part; not Heilprin, 1881, p. 364; Harris, 1895b, p. 31 in part; not Clark, 1895, p. 5; not Clark, 1896, p. 75; not Clark and Martin, 1901, p. 164, not pl. 32, figs. 7, 7a, 8, 8a, 8b

Corbula gibbosa Lea, 1833, p. 46, pl. 1, fig. 14; H. C. Lea, 1849, p. 98; Harris, 1895b, p. 20; Harris, 1919, p. 191, pl. 58, figs. 1-6; Brann and Kent, 1960, p. 263

Corbula (Neaera) ignota de Gregorio, 1890, p. 232, pl. 37, figs. 15-18 (left valves only)

Corbula (Neaera) gibbosa de Gregorio, 1890, p. 233 *C. churchisonii* [sic], pl. 36, fig. 26 copy Lea.; figs. 27-30 (right valves only); Coss-mann, 1893, p. 6

Corbula (Aloidis) gibbosa Lea, Dall, 1898b, p. 845 in part

"*Corbula*" *gibbosa* Lea, Vokes, 1944, p. 622, probably *Parmicorbula*

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Syntypes, No. 5063 (right valve); No. 5064 (left valve) ANSP; syntypes, *Corbula ignota* de Gregorio, No. 264448 de Gregorio Coll., PRI; see *Caestocorbula murchisonii* (Lea) for type information *C. oniscus* Conrad

Pecchiolia dalliana* Harris*Verticordiidae**

Pecchiolia dalliana Harris in Van Winkle and Harris, 1919, p. 16, pl. 2, fig. 7; Kellum, 1926, p. 22; Brann and Kent, 1960, p. 654

Range.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

Locality.—N.C.: New Hanover Co., City [Rock] Quarry near Wilmington (type)

Type.—Holotype, No. 1406 PRI

Pecten alabamensis Aldrich

See *Amusium (Propeamusium) alabamense* (Aldrich)

Pecten anatifipes Morton

See *Flexopecten anatifipes* (Morton)

"*Pecten anisopleura*" Conrad**Pectinidae**

Pecten anisopleura Conrad in Kerr, 1875, p. 18 Eocene; Heilprin, 1882a, p. 416; Dall, 1898b, pp. 740, 761

Range.—Eocene? Miocene?

Locality.—N.C.: Onslow Co., 40 mi. from Beaufort (found by Dr. Yarrow) [New River, Onslow Co. *vide* Dall, 1898b, p. 740]

Type.—Unknown

Pecten (Chlamys) beverlyi Tucker

See *Chlamys beverlyi* Tucker

Pecten biddleana Kellum

See *Chlamys biddleana* (Kellum)

Pecten (clarkeanus? var.) burlesonensis Harris

See *Chlamys burlesonensis* (Harris)

Pecten calvatus MortonSee *Eburneopecten calvatus* (Morton)*Pecten carolinensis* Conrad in Kerr, 1875See *Chlamys membranosa* (Morton) [*vide* Dall, 1898b, p. 736]*Pecten cawcawensis* HarrisSee *Chlamys cawcawensis* (Harris)*Pecten centrotus* DallSee *Chlamys perplana centrota* (Dall)*Pecten* (*Aequipecten*) (*perplanus* var.?) *centrotus* DallSee *Chlamys perplana centrota* (Dall)*Pecten choctavensis* AldrichSee *Chlamys choctavensis* (Aldrich)*Pecten claibornensis* Conrad *nomen nudum*See *Eburneopecten scintillatus* (Conrad)*Pecten clarceanus* AldrichSee *Chlamys clarkeana* (Aldrich)*Pecten clarceanus* Aldrich, Dall in part; Harris, 1919 in partSee *Eburneopecten hamiltonensis* (Tucker)*Pecten* (*Chlamys*) *clarceanus* Aldrich, Dall, 1898b in partSee *Chlamys burlesonensis* (Harris)*Pecten clarceanus* Aldrich "var.", Harris, 1919 in partSee *Eburneopecten hamiltonensis* (Tucker)*Pecten* (*Chlamys*) *cocoanus* DallSee *Chlamys cocoana* Dall*Pecten cookei* KellumSee *Chlamys cookei* (Kellum)*Pecten* (*Chlamys*) *corvinus* HarrisSee *Chlamys corvina* Harris*Pecten cushmani* KellumSee *Chlamys cushmani* (Kellum)*Pecten dalli* ClarkSee *Eburneopecten dalli* (Clark)*Pecten* (*Chlamys*) *danvillensis* WeisbordSee *Chlamys danvillensis* Weisbord in Tucker-Rowland*Pecten Deshayesii* LeaSee *Chlamys deshavesii* (Lea)? *Pecten deshavesii* Lea, Aldrich, 1886, p. 57. Not Lea, 1833See *Chlamys greggi* Harris*Pecten Deshayesii* Lea, Heilprin, 1891a, p. 403; Kennedy, 1895See *Chlamys burlesonensis* (Harris)*Pecten deshavesii* Lea "var." HarrisSee *Chlamys deshavesii dennisoni* Tucker*Pecten Deshayesii tirmus* de GregorioSee *Chlamys deshavesii* (Lea)

Pecten elixatus Conrad**Pectinidae**

Pecten elixatus Conrad, 1845b, p. 174; Conrad, 1848b, p. 130, pl. 14, figs. 13, 14; H. C. Lea, 1849, p. 103; Heilprin, 1882a, p. 417; Dall, 1898b, p. 719 under *P. Poulsoni*; Harris in Van Winkle and Harris, 1919, p. 15, pl. 2, figs. 10, 11, "Con.?"; Kellum, 1926, p. 35; Richards, 1943, p. 519, pl. 84, figs. 9, 24, not 22 as in expl. of pl. and in text; Harris, 1951, p. 9, pl. 3, figs. 9, 10 type

Pecten (*Pecten*) *elixatus* (Conrad), Tucker-Rowland, 1936a, p. 475, pl. 4, figs. 1, 2 syntypes

Pecten ? *elixatus* Conrad, Brann and Kent, 1960, pp. 662, 663

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. (fide Cooke and MacNeil, 1952, p. 20)

Localities.—S.C.: possibly *Berkeley Co.*, "near Santee Canal, in white friable limestone (upper Eocene)" (type). N.C.: *Jones Co.*, right bank of Trent R. below Pollocksville [sic]

Types.—Missing Moore, 1962, p. 60 [*elixatus* sic]; syntypes No. 12576 ANSP fide Tucker-Rowland, 1936a.

Pecten (*Pseudamusium*) *frontalis* Dall

See *Eburneopecten frontalis* (Dall)

See also *Eburneopecten dalli* (Clark)

Pecten gilbertharrisi Tucker [Rowland]

See *Chlamys beverlyi* Tucker [Rowland]

Pecten (*Chlamys*) *greggi* Harris

See *Chlamys greggi* Harris

Pecten (*Chlamys*) *indecisus* Dall

See *Chlamys indecisa* Dall

Pecten johnsoni Clark

See *Chlamys johnsoni* (Clark)

Pecten Kneiskerni Conrad

See *Chlamys kneiskerni* (Conrad)

Pecten Lyelli Lea

See *Chlamys deshayesi* (Lea)

Pecten membranosus Morton

See *Chlamys membranosa* (Morton)

Pecten minutus Lea, 1833, p. 88

See *Chlamys deshayesi* (Lea)

Pecten nuperus Conrad

See *Chlamys nupera* (Conrad)

Pecten (*Amusium*) *ocalanus* Dall

See *Amusium ocalanum* Dall

Pecten perplanus Morton

See *Aequipecten perplanus* (Morton). Oligocene

Pecten perplanus Morton, Heilprin, 1882a; Dall, 1898b; Cooke, 1926a; Semmes, 1929; Shimer and Shrock, 1944. Not Morton, 1833a

See *Chlamys spillmani* (Gabb)

Pecten perplanus Morton "var.", Harris, 1951. Not Morton, 1833a

See *Aequipecten perplanus* (Morton) "var.", Harris, 1951

- Pecten (perplanus var.?) centrotus* Dall
See *Aequipecten perplanus centrotus* (Dall)
- Pecten poulsoni* Morton. Oligocene
This is Eocene of authors; confused with *P. perplanus* Morton, 1833a, 1834
- Pecten (Ianira) promeus* de Gregorio
Chlamys poulsoni (Morton). Oligocene
- Pecten pulchricosta* Meyer and Aldrich
See *Chlamys pulchricosta* (Meyer and Aldrich)
- Pecten Rigbyi* Whitfield
See *Chlamys rigbyi* (Whitfield)
- Pecten rogersi* Clark
See *Eburneopecten dalli* (Clark)
- Pecten (Eburneopecten) scintillatus* Conrad
See *Eburneopecten scintillatus* Conrad
- Pecten scintillatus* Conrad; Dall, 1898b, p. 753 in part; Deussen, 1924, p. 67
See *Eburneopecten* sp.
- Pecten (Pseudamusium) scintillatus* Conrad, Dall, 1898b
See *Eburneopecten corneoides* (Harris)
- Pecten scintillatus* var. *corneoides* Harris
See *Eburneopecten corneoides* (Harris)
- Pecten scintillatus corneoides* Harris, Harris, 1919 in part; Renick and Stenzel, 1931; Brann and Kent, 1960 in part
See *Eburneopecten* sp.
- Pecten seabeensis* Richards
See *Chlamys seabeensis* (Richards)
- Pecten spillmani* Gabb
See *Chlamys spillmani* (Gabb)
- Pecten squamula* Lamarck
See Cf. *Amusium (Propeamussium) squamulum* (Lamarck)
- Pecten subminutus* Aldrich
See *Eburneopecten subminutus* (Aldrich)
- Pecten (Aequipecten) suwaneensis* Dall
See *Aequipecten suwaneensis* Dall
- Pecten trentensis* Harris
See *Chlamys trentensis* (Harris)
- Pecten (Chlamys) wautubbeanus* Dall
See *Chlamys wahtubbeana* Dall
- Pecten wautubbeanus cainei* Harris
See *Chlamys cainei* (Harris)
- Pecten (wahtubbeanus var. ?) Willcoxi* Dall
See *Chlamys wahtubbeana willcoxi* (Dall)

Pecten willcoxi cainei Harris
See *Chlamys cainei* (Harris)

Pecten sp.
See *Chlamys* sp.

Pecten sp.

Pectinidae

Pecten sp. Richards, 1950, p. 15

Range.—Tentatively middle Eocene
Locality.—N.C.: Johnston Co., 3 mi. W. of Clayton
Type.—Specimen, probably ANSP

Pecten sp.

Pectinidae

Pecten sp. Weller, 1907, no p., pl. 49, fig. 10

Range.—Lower Eocene. Manasquan fm.
Locality.—N.J.: Monmouth Co., Farmingdale
Type.—Figured specimen unknown

Pectunculus aviculoides Conrad
See *Limopsis aviculoides* (Conrad)

Pectunculus Broderipii Lea
See *Glycymeris staminea* (Conrad)

Pectunculus Broderipii de Gregorio not Lea
See *Limopsis aviculoides* (Conrad)

Pectunculus Broderipii radiatus de Gregorio
See *Glycymeris idonea* (Conrad)

Pectunculus circulus Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 389; Dall, 1898b, p. 608=*nomen nudum*

"Pectunculus" corbuloides Conrad

Pectunculus corbuloides Conrad, 1833c, p. 40 (Harris reprint, 1893, p. 66); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 104; d'Orbigny, 1850, p. 389; Harris, 1895b, p. 13; Stenzel, Krause, and Twining, 1957, p. 70 may be a *Pachecoa*

Limopsis corbuloides (Conrad), Conrad, 1860, p. 297; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 192; Dall, 1898b, p. 606 types mixed in ANSP with *P. declivis*; Harris, 1919, p. 39 types mixed ANSP

Indefinite species.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr. [possibly Cook Mt. fm. *vide* Harris]

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type) [possibly base of bluff *vide* Harris, 1895b, p. 13]

Types.—Possible syntypes (2), No. 30515 ANSP Moore, 1962, p. 50. Mixed with *P. declivis* *vide* Harris, 1919, p. 39

Pectunculus cuneus Conrad
See *Trinacria cuneus* (Conrad)

Pectunculus decisis (Conrad)
See *Pachecoa* (*Pachecoa*) *decisa* (Conrad)

Pectunculus declivis (Conrad)See *Pachecoa* (*Pachecoa*) *declivis* (Conrad)*Pectunculus deltoideus* LeaSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *ignus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *percuneatus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus deltoidus* Lea Mut. *striatus* de GregorioSee *Glycymeris trigonella* (Conrad)*Pectunculus ellipsis* LeaSee *Pachecoa* (*Stenzelia*) *ellipsis* (Lea)*Pectunculus idoneus* ConradSee *Glycymeris idonea* (Conrad)*Pectunculus idoneus* Conrad, ClarkSee *Glycymeris idonea* (Conrad) subsp.*Pectunculus idoneus* Conrad, Harris, 1897b, p. 49 var.See *Glycymeris idonea* (Conrad) subsp.

"*Pectunculus lentiformis* Lea" in Tuomey, 1858, p. 267 is an error for *Pectunculus pulvinatus* Conrad, 1832a [not Lamarck, 1805, p. 216] re-named *P. lentiformis* by Conrad, 1835a, p. 36 [Harris reprint, 1893, p. 92]. Yorktown Miocene. Not Eocene as indicated in Tuomey.

Pectunculus minor LeaSee *Glycymeris trigonella minor* (Lea)*Pectunculus obliqua* LeaSee *Limopsis aviculoides* (Conrad)*Pectunculus perplanus* ConradSee *Pachecoa* (*Stenzelia*) *perplana* (Conrad)*Pectunculus perplanatus* (Conrad), d'OrbignySee *Pachecoa* (*Stenzelia*) *perplana* (Conrad)*Pectunculus stamineus* ConradSee *Glycymeris staminea* (Conrad)*Pectunculus stamineus* Conrad, Aldrich, 1886See *Glycymeris idonea* (Conrad) subsp.*Pectunculus trigonellus* ConradSee *Glycymeris trigonella* (Conrad)*Pectunculus* (n. sp.) Tuomey, 1858, p. 271See *Glycymeris idonea* (Conrad) subsp.*Pectunculus* sp. Clark, 1896, p. 84See *Glycymeris idonea* (Conrad) subsp.*Pectunculus* sp. Harris, 1896, p. 53See *Glycymeris* sp.

Pelecypora hatchetigbeensis* (Aldrich)*Veneridae**

Cytherea hatchetigbeensis Aldrich, 1886, p. 39, pl. 4, fig. 1; de Gregorio, 1890, p. 218, 220, pl. 34, figs. 14a, b copy Aldrich as variety of *trigoniata*

Meretrix hatchetigbeensis (Aldrich), Cossmann, 1893, p. 10; Harris, 1897b, p. 63, pl. 12, figs. 11, 12; Brann and Kent, 1960, p. 543

Dosiniopsis (Pelecypora) hatchetigbeensis (Aldrich), Dall, 1902, p. 346; Dall, 1903a, p. 1226

Pelecypora hatchetigbeensis (Aldrich), Palmer, 1927/1929, p. 58, pl. 6, figs. 6, 8, 13, 14; Brann and Kent, 1960, p. 673

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: NE. Washington Co., Hatchetigbee Bluff, Tombigbee R. (type)

Types.—Syntypes, Nos. 638800, 638801 USNM

***Pelecypora trigoniata* (Lea)**

See *Katherinella trigoniata* (Lea)

Periploma butlerianum* Aldrich*Periplomatidae**

Periploma butleriana Aldrich, 1895b, p. 19 in part, pl. 5, fig. 3; Harris, 1897b, p. 74, pl. 14, figs. 13, 13a copy Aldrich; Dall, 1903a, p. 1529; Barry, 1942+, p. 58

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Choctaw Co., Butler (type). Not Washington Co. "Baker's Bluff" [Baker Hill] as per Aldrich. See *Periploma* sp.

Type.—Holotype, No. 638968 USNM

Periploma butleriana Aldrich, 1895b in part

See *Periploma* sp.

Periploma claibornense* (Lea)*Periplomatidae**

Anatina claibornensis Lea, 1833, p. 40, pl. 1, fig. 8; H. C. Lea, 1849, p. 96; Harris, 1895b, p. 10

Periploma claibornensis (Lea), Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; deGregorio, 1890, p. 229, pl. 36, fig. 23 copy Lea; Cossmann, 1893, p. 7; Harris 1919, p. 180, pl. 55, fig. 1 copy Lea; Harris and Palmer, 1946, p. 109; Brann and Kent, 1960, p. 674, not lost, copy Lea holotype

Periploma Collardi Harris, Dall, 1903a, p. 1528 in part

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5023 ANSP [Harris Cat. 1895c]

Periploma claibornense parvum* Harris*Periplomatidae**

Periploma claibornensis var. *parva* Meyer, 1885a, pp. 461, 467 not described, *nomen nudum*; Harris in Harris and Palmer, 1946, p. 109, pl. 23, figs. 16-18 copy Harris, 1897a

? *Periploma* sp. Harris, 1897a, p. 471, pl. 18, figs. 8, 8a, 8b

The above name by Meyer is a *nomen nudum* although Harris did not describe the species, he illustrated it well

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, ANSP; specimen, No. 638700 USNM labeled "typical"

Periploma collardi Harris

Periplomatidae

Periploma collardi Harris, 1895a, p. 52, pl. 3, fig. 4; Dall, 1903a, p. 1528 in part; Harris, 1919, p. 180, pl. 55, figs. 2 type, 3-5 variations; Brann and Kent, 1960, p. 674 variations

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS: *Brazos Co.*, Dr. Collard's farm, Sparks Headright (type). LA.: *Winn Par.*, St. Maurice; mouth of Saline Bayou (Harris) variations. ALA.: *Monroe Co.*, base of Claiborne Bluff (Harris) variations

Type.—Holotype, No. 35672 BEG

Periploma Collardi Harris, Dall, 1903a in part

See *Periploma claibornensis* (Lea)

Periploma collardi Harris variation

Periplomatidae

Periploma collardi Harris "var.", Harris and Palmer, 1946, p. 110, pl. 23, fig. 22; Brann and Kent, 1960, p. 674 [fig. 22 not 33]

Range.—Upper Eocene. White Bluff fm., lower Jackson gr.

Locality.—ARK.: *Jefferson Co.*, White Bluff, Arkansas R.

Type.—Figured specimen, No. 4394 PRI

Periploma collardi australinum Harris

Periplomatidae

Periploma collardi australina Harris, 1919, p. 180, pl. 55, figs. 6-8; Brann and Kent, 1960, pp. 674, 675

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: *Orangeburg Co.*, Orangeburg District (type)

Types.—Syntypes, Nos. 1266, 1267 PRI

Periploma collardi turgidum Harris

Periplomatidae

Periploma collardi var. *turgida* Harris in Harris and Palmer, 1946, p. 110, pl. 23, figs. 19-21; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 675

Range.—Upper Eocene. Jackson gr. (type)

Localities.—ARK.: *St. Francis Co.*, Crow Cr. near Forrest City (type); *Jefferson Co.*, White Bluff, Arkansas R.

Type.—Holotype, No. 4393 PRI

Periploma complicatum Meyer

Periplomatidae

Periploma complicata Meyer, 1886b, p. 85, pl. 1, fig. 22; not Meyer, 1887a, p. 16; de Gregorio, 1890, p. 230, pl. 36, fig. 24 as *complanata* copy Meyer; Dall, 1903a, p. 1529 not Jacksonian; Harris and Palmer, 1946, p. 110, pl. 23, fig. 18a copy Meyer, probably a pathologic specimen of *P. claibornensis* Lea fide Harris

Anafina [sic] *complicata* (Meyer), Cossmann, 1893, p. 7

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638855 USNM

Periploma howei Barry**Periplomatidae**

Periploma howei Barry, 1942+, p. 58, pl. 6, figs. 6, 7; Wasem and Wilbert, 1943, p. 192

Range.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

Locality.—TEXAS: *Sabine Co.*, Pendleton, $\frac{1}{4}$ mi. upstream from bridge over Sabine R. on La. Highway 6 (type)

Types.—Holotype, No. 5124; paratype, No. 5125 LSU Pal. Mus.

Periploma sp. Harris, 1897a

See ? *Periploma claibornensis parva* Meyer

Periploma sp.**Periplomatidae**

Periploma butleriana Aldrich, 1895b, p. 19 in part, "Baker's Bluff"

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Locality.—ALA.: *Washington Co.*, Bakers Bluff, 1 mi. above St. Stephen's Bluff, Tombigbee R.

Type.—Unfigured specimen, USNM

Periploma (?) sp.**Periplomatidae**

Periploma (?) sp. Clark and Martin, 1901, p. 184

Range.—Lower Eocene. Nanjemoy fm.

Locality.—MD.: *Charles Co.*, E. of Port Tobacco. VA.: *King George Co.*, Woodstock

Types.—Unfigured specimens, No. 6430 ANSP and USNM

Periploma sp.**Periplomatidae**

Periploma sp. Barry, 1942+, p. 59, pl. 6, fig. 5

Range.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

Locality.—TEXAS: *Sabine Co.*, Sabinetown, Sabine R.

Type.—Figured specimen, No. 5126 LSU Pal. Mus.

Periploma sp.**Periplomatidae**

Periploma sp. Gardner, 1935, p. 149

Range.—Paleocene. Wills Point fm., upper Midway gr.

Locality.—TEXAS: *Bastrop Co.*, Colorado R. $\frac{1}{2}$ to $\frac{3}{4}$ mi. above mouth of Dry Creek

Type.—Unfigured specimen probably USNM

Periploma sp.**Periplomatidae**

Periploma sp. Gardner, 1935, p. 149

Range.—Paleocene. Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Limestone Co.*, USGS Sta. 11942, $\frac{1}{4}$ mi. S. of Big Hill in roadside ditch. *Falls Co.*, USGS Sta. 11932, $\frac{1}{4}$ mi. NW. Stranger School. *Milam Co.*, USGS Sta. 11916, Brazos R. 1 mi. below Falls Co. line, bed No. 1; USGS Sta. 11921, Brazos R., 1 mi. below Falls Co. line

Types.—Unfigured specimens probably USNM

Periplomya elliptica (Gabb)**Laternulidae***Anatina elliptica* Gabb, 1862a, p. 324*Periplomya elliptica* (Gabb), Whitfield, 1885, p. 177, pl. 23, figs. 14, 15; Johnson, 1905, p. 13; Weller, 1907, p. 522, pl. 57, figs. 8-11; Richards in Richards, *et al.*, 1958 p. 164, pl. 26, fig. 7 type. See for synonymy and discussion*Range*.—Upper Cretaceous (type). Lower Eocene, Manasquan fm.*Localities*.—N.J.: Gloucester Co., near Mullica Hill (type); Ocean Co., near New Egypt*Type*.—Holotype, No. 18767 ANSP**Periplomya truncata** Whitfield**Laternulidae***Periplomya truncata* Whitfield, 1885, p. 220, pl. 28, figs. 20, 21; Whitfield, 1899, p. 163; Weller, 1907, p. 522, pl. 57, fig. 10 type under *Periplomya elliptica* (Gabb); Richards, *et al.*, 1958, p. 164 under *P. elliptica* (Gabb)*Veleda nasuta* Whitfield, 1885, p. 217, pl. 28, fig. 23; Whitfield, 1899, p. 166; Weller, 1907, p. 522, pl. 57, fig. 11 under *Periplomya elliptica* (Gabb); Richards, *et al.*, 1958, p. 164 under *P. elliptica* (Gabb)*Range*.—Lower Eocene, Manasquan fm. (type)*Locality*.—N.J.: Ocean Co., near New Egypt (type)*Type*.—Holotype, *P. truncata*, No. 7466 State Mus. Trenton, N.J.*Perna cornelliana* HarrisSee *Isognomon cornelliana* (Harris)*Perna cretacea* (Conrad)See *Modiolus cretaceus* Conrad*Perna silicea* Tuomey, 1848, p. 154 *nomen nudum* (*fide* Harris, 1919, p. 201)**"Perna" texana** GabbPl. 1, fig. 7 **Mytilidae***Perna texana* Gabb, 1862c, p. 371; Conrad, 1865a, p. 10; Stenzel, Krause, and Twining, 1957, pp. 39, 40*Modiola texana* (Gabb), Harris, 1895a, p. 46 in part, not pl. 1, fig. 2*Modiolus (Brachydontes) texanus* (Gabb), Dall, 1898b, p. 796 in part*Modiolus texanus* (Gabb), Harris, 1919, p. 32 in part, not pl. 17, figs. 6, 7 [see *Brachydontes texanus* (Harris)]; not Trowbridge, 1932, pl. 43, fig. 3*Range*.—Cretaceous (Cenomanian). Woodbine gr., *fide* Stenzel in Stenzel, Krause, and Twining, 1957, pp. 39, 40*Locality*.—TEXAS: Johnson Co., "Caddo Peak" (Gabb) "near old Caddo P.O. on old road from Cleburne to Fort Worth" *fide* Stenzel, Krause, and Twining, 1957, pp. 39, 40*Type*.—Holotype, ANSP**Petricola claibornensis** Harris**Petricolidae***Petricola claibornensis* Harris, 1919, p. 153, pl. 48, figs. 1, 2*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Missing USNM prior to 1962

Petricola ? novaegyptica Whitfield**Petricolidae**

Petricola Nova-Aegyptica Whitfield, 1885, p. 216, pl. 28, fig. 22

Petricola nova-aegyptica Whitfield, 1899, p. 163; Weller, 1907, p. 614, pl. 68, fig. 13 type

Range.—Lower Eocene, Manasquan fm. (type)

Locality.—N.J.: Ocean Co., near New Egypt (type)

Type.—Rutgers College (Whitfield, 1899). Lost (1963)

Phacoides (Miltha?) albaripus Gardner**Lucinidae**

Phacoides (Miltha?) albaripa Gardner, 1935, p. 173, pl. 16, figs. 1, 2

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Maverick Co.*, White Bluff, Rio Grande, 4½ mi. SW. of Windmill (Jacal) ranch house, USGS Sta. 6575 (type); *Bibora Cr.* just below Bibora tank, about 18 mi. SE. of Eagle Pass; *Uvalde Co.*, Frio R. just above waterhole opposite apiary below Englemanns ranch

Type.—Holotype, No. 370965 USNM

Phacoides aquianus (Clark)

See Cf. *Saxolucina aquiana* (Clark)

Phacoides (Here) carinifera (Conrad)

See *Linga carinifera* (Conrad)

Phacoides (Miltha) claibornensis (Conrad)

See *Saxolucina (Plastomiltha) claibornensis* (Conrad)

Phacoides (Miltha) claytonia (Harris)

See *Saxolucina claytonia* (Harris)

Phacoides (Here) hamatus Dall

See *Linga hamata* (Dall)

Phacoides (Pseudomiltha ?) megameris Dall

See *Pseudomiltha megameris* Dall

Phacoides (Lucinisca) mesakta Gardner**Lucinidae**

Phacoides (Lucinisca) mesakta Gardner, 1935, p. 174, pl. 16, figs. 3, 4

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Locality.—TEXAS: *Travis Co.*, clay from bluff at Webberville, USGA Sta. 5282 (type)

Type.—Holotype, No. 370966 USNM

Phacoides (Miltha) ocalanus Dall

See *Miltha ocalana* Dall

Phacoides (Miltha) pandatus (Conrad)

See *Eomiltha pandata* (Conrad)

Phacoides perovatus Dall (=Miocene)

See *Lucina* sp. Harris, 1951

Phacoides rotundus (Lea)

See *Epilucina rotunda* (Lea)

Phacoides (Parvilucina) sabelli Gardner**Lucinidae**

Phacoides (Parvilucina) sabelli Gardner, 1927, p. 372, figs. 10-13; Barry, 1942+, p. 65, pl. 8, fig. 3

Range.—Lower Eocene. Pendleton Ferry fm. (Barry), middle Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

Localities.—TEXAS: *Sabine Co.*, 1½ mi. W. of Sabinetown, Sabine R. (type); ¼ mi. downstream from Sabinetown Ferry, Sabine R.; ¼ mi. upstream from bridge over Sabine R. on La. Highway 6

Types.—Syntypes, No. 369245 USNM

Phacoides (Parvilucina) Smithi (Meyer)

See *Linga (Cavilinga) pomilia smithi* (Meyer)

Phacoides (Here) wacissanus Dall (=Miocene)

See *Lucina* sp.

Phacoides sp.**Lucinidae**

Phacoides sp. Harbison, 1944, p. 5, pl. 2, fig. 4

Range.—Middle Eocene. Santee ls., upper Claiborne gr.

Locality.—S.C.: *Berkely Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

Type.—Figured specimen, ANSP

Phacoides (Lucinisca) spp.**Lucinidae**

Phacoides (Lucinisca) sp. Gardner, 1935, p. 175 three species

Range.—Paleocene. Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Caldwell Co.*, 5½ mi. N. of Lockhart; *Falls Co.*, 6 mi. NW. of Kosse; *Travis Co.*, 4 mi. below Webberville, Colorado R.

Types.—Unfigured specimens not found USNM, 1962

Phenacomya mauryi (Harris)

See *Pholadomya mauryi* Harris

Phenacomya petrosa (Conrad)**Pholadidae**

Pholas petrosa Conrad, 1842b, p. 193, pl. 2, fig. 4; Conrad, 1846b, p. 213, pl. 1, fig. 1 (not pl. 2 as in text); H. C. Lea, 1849, p. 104; Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; Dall, 1898b, p. 823

Pholas (?) *petrosa* Conrad, Clark, 1895, p. 5; Clark, 1896, p. 73, pl. 15, figs. 1a-c

Phenacomya petrosa (Conrad), Clark and Martin, 1901, p. 161, pl. 30, figs. 4, 4a, 4b

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: *Prince Georges Co.*, Piscataway (type); Fort Washington; *Charles Co.*, Clifton Beach. VA.: *Stafford Co.*, Aquia Cr.

Type.—Missing ANSP, Moore, 1962, p. 87

Pholadomya claibornensis Aldrich**Pholadomyidae**

Pholadomya claibornensis Aldrich, 1886, p. 38, pl. 4, fig. 5; de Gregorio, 1890, p. 234, pl. 38, fig. 27 copy Aldrich; Cossmann, 1893, p. 7; Dall, 1903a, p. 1531; Harris, 1919, p. 197 (in part) *Phladomya* [sic], pl. 59, figs. 6, copy type, 7, 8, 10; not fig. 9[=*P. harrisi* Gardner]; Kellum, 1926, p. 22; Stenzel, Krause, and Twining, 1957, p. 164; Brann and Kent, 1960, pp. 685, 686 base of Claiborne bluff

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. [not Gosport sd. as in Brann and Kent]

Localities.—ALA.: Monroe Co., base of Claiborne bluff, Alabama R. (type) [from type label]; Lisbon Bluff, Alabama R.

Type.—Holotype, No. 638798 USNM

Pholadomya claibornensis Aldrich, Harris, 1919 (in part)

See *Pholadomya harrisi* Gardner

Pholadomya claibornensis harrisi Gardner

See *Pholadomya harrisi* Gardner

Pholadomya harrisi Gardner**Pholadomyidae**

Pholadomya claibornensis Harris, 1919, p. 197 in part, pl. 59, fig. 9.

Not *Pholadomya claibornensis* Aldrich, 1886, p. 38

Pholadomya (Claibornesis [sic] subsp. ?) *harrisi* Gardner, 1927, p. 367, type not Cornell Univ. as stated

Pholadomya harrisi Gardner, Renick and Stenzel, 1931, p. 104 in part loc. 4 only; Stenzel, Krause, and Twining, 1957, p. 162, pl. 18, fig. 14; pl. 19, figs. 6, 7

Pholadomya claibornensis harrisi Gardner, Gardner, 1945, p. 86, pl. 6, figs. 1-3, 8, 9, 12, type not Cornell Univ. as stated

Range.—Middle Eocene. Weches fm. (type only), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner, 1945), upper Claiborne gr.

Localities.—TEXAS: Cherokee Co., Lewis' house, 2 mi. E. of Alto (type); Brazos Co., Little Brazos R.; Leon Co., Bear Branch School; Houston Co., creek bed, 2 mi. W. of Crockett; Hurricane Bayou; Alabama Ferry, Trinity R.; Sabine Co., Tebo Bayou. LA.: Winn Par., St. Maurice

Type.—Formerly No. 452 Texas State Mus. *fide* Harris, 1919; now lost *fide* Stenzel, *et al.*, 1957, p. 163

Pholadomya harrisi Gardner, Renick and Stenzel, 1931

See *Pholadomya harrisi* Gardner loc. 4 only

See *Pholadomya petropolitana* Stenzel and Twining loc. 1 only

Pholadomya leonensis Stenzel and Twining**Pholadomyidae**

Pholadomya leonensis Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 164, pl. 18, fig. 13; pl. 19, figs. 4, 5

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: Leon Co., north ditch of old abandoned Concord-Centerville county road, 0.6 mi. SE. site of dismantled Robbins depot . . . (Bur. Ec. Geol. 145-T-1). See Stenzel, Krause, and Twining for complete description (type)

Type.—Holotype, No. 20550, BEG

Pholadomya marylandica Conrad**Pholadomyidae**

Pholadomya marylandica Conrad, 1842b, pp. 172, 193, pl. 1, fig. 3; Conrad, 1846b, p. 214, pl. 2, fig. 9 (not pl. 1 as in text); H. C. Lea, 1849, p. 104 (as *Marilandica*); Conrad, 1865a, pp. 3, 190+; Conrad, 1866a, p. 8; Clark, 1895, p. 5; Clark, 1896, p. 75, pl. 19, fig. 2; Clark and Martin, 1901, p. 184, pl. 43, fig. 3; Dall, 1903a, p. 1531; Stenzel, Krause, and Twining, 1957, p. 164

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: Charles Co., Clifton Beach; Prince Georges Co., Fort Washington; Piscataway (type, Conrad, 1842b). VA.: Stafford Co., Aquia Cr.

Type.—Possible holotype, No. 20384 ANSP, Moore, 1962, p. 74

Pholadomya mauryi Harris**Pholadomyidae**

Pholadomya mauryi Harris, 1896, p. 71, pl. 6, figs. 17, 17a; Stenzel, Krause, and Twining, 1957, p. 165; Brann and Kent, 1960, p. 686

Phenacomya mauryi (Harris), Dall, 1898b, p. 823 (footnote) [new genus]

Range.—Paleocene. Midway gr. (type)

Localities.—TENN.: Hardeman Co., Hannah's, 1¼ mi. N. of Crainesville (type); Huddleston's, 3 mi. W. of Crainesville

Type.—Holotype, No. 73 PRI

Pholadomya petropolitana Stenzel and Twining**Pholadomyidae**

Pholadomya harrisi Gardner, Renick and Stenzel, 1931, p. 104 in part; loc. 1 only

Pholadomya petropolitana Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 163, pl. 18, fig. 15; pl. 19, figs. 1-3

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20629 BEG, paratypes (5) BEG

Pholas alatoidea Aldrich**Pholadidae**

Pholas Roperiana Tuomey, 1858, pp. 267, 272 not Conrad; Aldrich, 1886, p. 37; Harris, 1919, p. 201 *nomen nudum*. Not Tuomey, 1848, p. 153 S.C. also *nomen nudum*

Pholas alatoidea Aldrich, 1886, p. 36 in part, pl. 4, figs. 9, 9c not fig. 9b=*P. aldrichi*; de Gregorio, 1890, p. 237, pl. 38, figs. 15, 16 copy Aldrich; not fig. 17=*P. aldrichi* de Gregorio; Harris, 1897b, p. 69, pl. 13, figs. 15, 15a; Brann and Kent, 1960, p. 686

Barnea alatoidea (Aldrich), Cossmann, 1893, p. 5; Dall, 1898b, p. 817 *Pholas alatoideus* Aldrich, Harris, 1899b, p. 304 in part, pl. 53, fig. 12 copy Harris, 1897b, not Texas locality

Range.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

Types.—Syntypes, Nos. 638792 (fig. 9) USNM; fig. 9c missing prior to 1962

Pholas alatoideus Aldrich, Harris, 1899b, in part

See *Pholas* sp.

Pholas aldrichi de Gregorio**Pholadidae**

Pholas alatoidea Aldrich, 1886, p. 36 in part, pl. 4, fig. 9b only
Pholas alatoidea Mut. *Aldrichi* de Gregorio, 1890, p. 237, pl. 38, fig. 17
 copy Aldrich based on figure and not specimen

Range.—Lower Eocene. Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

Type.—Holotype, fig. 9b, No. 643735 USNM

Pholas petrosa Conrad

See *Phenacomya petrosa* (Conrad)

Pholas Roperiana Tuomey, 1848, p. 153; Tuomey, 1858, pp. 267, 272
 not Conrad as in text; Aldrich, 1886, p. 37; Harris, 1919, p. 201
nomen nudum

See *Pholas alatoidea* Aldrich

Pholas sp.**Pholadidae**

Pholas alatoideus Aldrich, Harris, 1899b, p. 304 in part, not pl. 53, fig. 12 same fig. as Harris, 1897b=Gregg's Ldg., Ala.

Range.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr.

Locality.—TEXAS: Sabine Co., Sabinetown, Sabine R.

Type.—Specimen lost

Physoida clarkeana (Aldrich)**Corbulidae**

Corbula clarkeana Aldrich, 1908b, p. 74, pl. 5, figs. 4, 5

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 639052 USNM

Pinna cawcawensis Harris

See *Atrina cawcawensis* (Harris)

Pinna gardnerae Barry

See *Atrina gardnerae* (Barry)

Pinna gravis Harris

See *Atrina gravis* (Harris)

Pinna ? harnetti Richards**Pinnidae**

Pinna harnetti Richards, 1948, p. 4, pl. 1, figs. 1, 2; Richards, 1950, pp. 14, 15, figs. 63a, b; Stenzel, Krause, and Twining, 1957, p. 80 cf. *Atrina*

Range.—Lower Eocene. Possibly Black Mingo fm. *fide* Richards, 1950, p. 14. Middle Eocene. (? Claiborne) (type)

Locality.—N.C.: Harnett Co., on the Sprunt or Highland Farm, 4 mi. NE. of Spout Springs (type)

Types.—Holotype, No. 18684; paratype, No. 18685 ANSP

Pinna quadrata Dall

See *Atrina quadrata* (Dall)

Pinna rostriformis Morton
See *Atrina rostriformis* (Morton)

Pinna sp.
See *Atrina* sp.

Pinna sp., Morton, 1834
See *Atrina rostriformis* (Morton)

Pitar ("Agriopoma") amichel Gardner **Veneridae**

Meretrix trigoniata bastropensis Harris, 1919, p. 148 in part, pl. 47, fig. 6 fide Gardner, 1945, p. 117

Pitaria (Lamelliconcha) trigoniata bastropensis (Harris), Palmer, 1927/1929, p. 42, pl. 8, fig. 21 copy Harris

Callocardia (Agriopoma) amichel Gardner, 1945, p. 116, pl. 9, figs. 26-29, 31 see for synonymy; Perrilliat Montoya, 1963, p. 12, pl. 2, fig. 3

This species is introduced because it is involved in the data originally given by Harris for *Meretrix trigonata bastropensis*, 1919. See Gardner, 1945.

The generic position is not determinable, but it is not *Callocardia*. *Callocardia* does not occur in the American Cenozoic.

Range.—Middle Eocene. Middle Laredo fm. (type), upper Claiborne gr.

Localities.—MEXICO: State of Tamaulipas 2890 meters S 3° E. from La Presa well, No. 1, Mier (type). TEXAS: *Webb and Zapata Cos.* fide Gardner, 1945

Types.—Holotypes, No. 496021; paratype, No. 559290 USNM

Pitar angelinae (Harris) **Veneridae**

Meretrix angelinae Harris in Van Winkle and Harris, 1919, p. 17, pl. 2, figs. 12, 13; Brann and Kent, 1960, p. 543

Pitaria (Pitaria) angelinae (Harris), Palmer, 1927/1929, p. 17, pl. 4, figs. 16, 19 syntypes

Range.—Middle Eocene. Claiborne gr. (type). See Palmer, 1937, p. 485; Palmer in Harris and Palmer, 1947, p. 456

Locality.—TEXAS: *Angelina Co.*, along Angelina R., 2 mi. above Marion (type)

Types.—Syntypes, Nos. 1411, 1412 PRI

Cf. Pitar biboraensis (Gardner) **Veneridae**

Callocardia biboraensis Gardner, 1935, p. 184, pl. 18, figs. 1, 2

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Locality.—TEXAS: *Maverick Co.*, Bibora tank on the Indio ranch, 18 mi. SE. of Eagle Pass (type)

Type.—Holotype, No. 370967 USNM

Pitar (Pitar) cornelli (Harris) **Veneridae**

Meretrix cornelli Harris, 1895b, p. 49, pl. 1, fig. 5; Harris, 1919, p. 144, pl. 46, figs. 1, 2; Brann and Kent, 1960, p. 543

Pitaria (Pitaria) cornelli (Harris), Palmer, 1927/1929, p. 16, pl. 3, figs. 4-6, 8 type; Brann and Kent, 1960, p. 699

Not *Pitar* cf. *cornelli* (Harris), Harris, 1951, p. 22, pl. 11, figs. 4, 5; Brann and Kent, 1960, pp. 691, 692=*Pitar* sp.

—*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 45 PRI

Pitar cf. *cornelli* (Harris), Harris, 1951

See *Pitar* sp.

Pitar eversus (Conrad)

Veneridae

Cytherea eversa Conrad, 1845b, p. 174; Conrad, 1848b, p. 130, pl. 14, fig. 21; H. C. Lea, 1849, p. 99; Tuomey, 1858, p. 265 not p. 271; Clark, 1895, p. 5; Clark, 1896, p. 77, pl. 17, figs. 2a-d types; not Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10)

Meretrix eversa (Conrad), Conrad, 1854, p. 30

Dione eversa (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Pitaria (Pitaria) eversa (Conrad), Palmer, 1927/1929, p. 10, pl. 4, figs. 10, 13 paratype, 21; Brann and Kent, 1960, pp. 699, 700

Range.—Lower Eocene. Nanjemoy fm. (type).

Localities.—VA.: Hanover Co., Marlbourne, Pamukey R. (type); King George Co., [just below] mouth of Potomac Cr.

Type.—Holotype, No. 4132 ANSP, Palmer 1927/29. Missing Moore, 1962, p. 59

Pitar ? exiguus (Conrad)

Veneridae

Caryatis exigua Conrad, 1871a, p. 201, pl. 11, fig. 3; Harris, 1919, p. 150, pl. 47, fig. 7 also under *Meretrix trigoniata bastropensis*, p. 148 with question

Cytherea (Caryatis) exigua Conrad, de Gregorio, 1890, p. 219, pl. 33, fig. 26 copy Conrad

Meretrix exigua (Conrad), Cossmann, 1893, p. 10

? *Pitaria exigua* [sic] (Conrad), Palmer, 1927/1929, p. 30, pl. 3, fig. 1 copy Conrad

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Presumably lost, not in ANSP *fide* Harris, 1919, p. 150; Moore, 1962, p. 60

Pitar gazleyensis (Palmer)

Veneridae

Pitaria (Pitaria) gazleyensis Palmer in Price and Palmer, 1928, p. 25, pl. 6, figs. 8, 11, 12; Brann and Kent, 1960, p. 700

Range.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

Locality.—TEXAS: Bastrop Co., Smithville, mouth of Gazley Cr., Colorado R., (type)

Type.—Holotype, No. 345 PRI

Cf. Pitar hawtofi (Gardner)

Veneridae

Callocardia hawtofi Gardner, 1935, p. 182, pl. 17, figs. 1, 2

Generic position not determinable. Not *Callocardia*

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: Maverick Co., Comanche Cr. Crossing on W. road to Farias ranch; 18 mi. S. and E. of Eagle Pass; Bibora

tank about 18 mi. SE. of Eagle Pass; Bibora tank 7 mi. E. of new Indio ranch house; Indio Wells, about 29 mi. SE. of Eagle Pass (type); ? White Bluff, $4\frac{1}{2}$ mi. W. of S. of Windmill (Jackal) ranch house on Rio Grande

Type.—Holotype, No. 370923 USNM

Pitar juliae (Palmer)

Veneridae

Pitaria (*Pitaria*) *juliae* Palmer in Price and Palmer, 1928, p. 26, pl. 6, figs. 2, 7; Brann and Kent, 1960, p. 701

Range.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

Locality.—TEXAS: *Bastrop* Co., Smithville, mouth of Gazley Cr., Colorado R., (type)

Type.—Holotype, No. 340 PRI

Cf. Pitar kempae (Gardner)

Veneridae

Callocardia kempae Gardner, 1935, p. 185, pl. 17, fig. 4-6; pl. 18, fig. 3

Although it is difficult to give an exact generic venerid designation, the genus is not *Callocardia*

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Localities.—TEXAS: *Kaufman* Co., Water Hill, 5 mi. NE. of Kemp; $2\frac{1}{2}$ mi. NE. of Kemp on public road (type)

Types.—Syntypes (3), Nos. 370968, 370969 USNM

Pitar lenis (Conrad)

Veneridae

Cytherea lenis Conrad, 1848b, p. 130, pl. 14, fig. 19; not Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10)

Dione lenis (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Meretrix lenis (Conrad), Clark and Martin, 1901, p. 168, pl. 33, fig. 4

Pitaria (*Pitaria*) *lenis* (Conrad), Palmer, 1927/1929, p. 10, pl. 4, fig. 7 copy type

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: *Hanover* Co., Marlbourne (type); *King George* Co., Woodstock. MD.: *Prince Georges* Co., ravine N. of Thrift (?)

Type.—Holotype [?], No. 6384 ANSP; *fide* Clark and Martin, 1901, p. 168; missing Moore, 1962, p. 69

Pitar (Lamelliconcha) macbeani (Harris)

Veneridae

Meretrix macbeani Harris, 1919, p. 140, pl. 44, figs. 7, 8, not 9 as in text

Pitaria (*Lamelliconcha*) *macbeani* (Harris), Palmer, 1927/1929, p. 42, pl. 8, figs. 7, 9 (holotype)

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—GA.: *Burke* Co., McBean Cr. (type)

Type.—Holotype, No. 559283 USNM

Pitar (Pitar) nuttali (Conrad)

Veneridae

Cytherea Nuttali Conrad, 1834, p. 149; Conrad, 1835a, Harris reprint, 1893, pp. 8, 115, pl. 19, fig. 1 as *Nuttallii*; Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 380; Tuomey, 1858, p. 265, not pp. 269, 271; Heilprin, 1881, p. 370; de Gregorio, 1890, p. 219 in part, not pl. 34, fig. 23 copy Conrad, 1857; Harris,

1895b, p. 30. Not *Cytherca Nuttalli* Conrad, Conrad, 1857, p. 162, pl. 4, fig. 5—*Pitar trigoniata* var. *bastropensis* Harris; not Schuchert, et al., 1905, p. 213 not holotype *C. nuttalli*=*P. trigoniata* var. *bastropensis*

Meretrix nuttalli (Conrad), Conrad, 1854, p. 30 *Nuttallii*; Harris, 1919, p. 143, pl. 45, fig. 4 copy Conrad, (figs. 5-8 vars.); Brann and Kent, 1960, p. 544

Dione Nuttalli (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7 in part, Ala. only

Pitaria (Pitaria) nuttalli (Conrad), Palmer, 1927/1929, p. 14, pl. 3, figs. 2, 7, 13

Not *Pitar* sp. cf. *nuttalli* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 1, 2; Brann and Kent, 1960, p. 692=*Pitar* sp.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Probable holotype, No. 20171 ANSP, Moore, 1962, p. 80

Pitar (Pitar) nuttalliopsis (Heilprin)

Veneridae

Cytherca Nuttalliopsis Heilprin, 1881, p. 370, pl. 20, fig. 1; Aldrich, 1886, pp. 53, 57; de Gregorio, 1890, p. 220; not Aldrich, 1894b, p. 242

? *Cytherca minima* Lea, Aldrich, 1886, p. 53; Palmer, 1927/1929, p. 214. Not Lea, 1833, *fide* Harris, 1897b, p. 61

Meretrix nuttalliopsis (Heilprin), Harris, 1897b, p. 61, pl. 12, fig. 5; Harris, 1919, p. 141, pl. 44, figs. 9, 10; Brann and Kent, 1960, p. 545

Pitaria (Pitaria) nuttalliopsis (Heilprin), Palmer, 1927/1929, p. 12, pl. 2, figs. 1, 3, 5, 6, 11, 17; Brann and Kent, 1960, p. 702

Pitar nuttalliopsis (Heilprin), Stewart, 1930, p. 233

Range.—Lower Eocene. Tuscahoma fm., middle Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Knight's Branch (type); Thomasville; near mouth of Bashi Cr.; Woods Bluff, Tombigbee R.; Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.; Gregg's Ldg., Alabama R.; Bells Ldg., Alabama R.; Dale Co., Ozark

Type.—Holotype, ANSP

Pitar (Pitar) nuttalliopsis fulvus (Harris)

Veneridae

Meretrix nuttalliopsis (Heilprin) var. *fulva* Harris, 1897b, p. 62, pl. 12, figs. 8-10; Brann and Kent, 1960, p. 545 lectotype designated

Pitaria (Pitaria) nuttalliopsis fulva (Harris), Palmer, 1927/1929, p. 14, pl. 2, figs. 9, 13

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Wilcox Co., Yellow Bluff, Alabama R. (type). Ga.: Clay Co., Fort Gaines

Types.—Lectotype, No. 163; paralectotypes, Nos. 164, 165 PRI

Pitar (Pitar) nuttalliopsis greggi (Harris)

Veneridae

Meretrix nuttalliopsis var. (Heilprin), Harris, 1897a, p. 477, pl. 22, figs. 1-2 erroneously written *M. mortoniopsis*

Meretrix nuttalliopsis var. *greggi* Harris, 1897b, p. 62, pl. 13, figs. 1, 2

Pitaria (Pitaria) nuttalliopsis greggi (Harris), Palmer, 1927/1929, p. 13, pl. 2, figs. 2, 4, 10; Barry, 1942+, p. 68, pl. 9, fig. 2; Brann and Kent, 1960, p. 702

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr. (type)

Localities.—ALA.: *Monroe Co.*, Gregg's Ldg., Alabama R.; Bells Ldg., Alabama R. (type); *Wilcox Co.*, Lower Peach Tree, Alabama R. LA.: For localities in *Natchitoches Par.* and *Sabine Par.* see Barry, 1942+, p. 68. TEXAS: *Sabine Co.*, Sabinetown, Sabine R.; Pendleton, Sabine R.

Type.—Holotype, No. 6294 ANSP

Pitar (Pitar) nuttalliopsis heilprini (Palmer)

Veneridae

Pitaria (Pitaria) nuttalliopsis heilprini Palmer, 1927/1929, p. 14, pl. 2, fig. 8; Brann and Kent, 1960, p. 702

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 1581 PRI

Pitar (Pitar) ovatus (Rogers and Rogers)

Veneridae

Cytherea ovata Rogers and Rogers, 1837, p. 340; 1839b, pl. 27, fig. 2 (reprint, 1884, p. 668, pl. 2, fig. 2); H. C. Lea, 1849, p. 99; Clark 1895, p. 5 in part; Clark, 1896, p. 76 in part not pl. 16=*P. (P.) pyga* (Conrad)

Cytherea liciata Conrad, 1845b, p. 174; Conrad, 1848b, p. 131, pl. 14, fig. 20; H. C. Lea, 1849, p. 99. Not Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10)

Meretrix liciata (Conrad), Conrad, 1854, p. 30

Meretrix ovata (Rogers), Conrad, 1854, p. 30; Richards, 1948, p. 3, pl. 2, figs. 8, 9; Richards, 1950, p. 15

Dione ovata (Rogers), Conrad; 1865a, p. 6; Conrad, 1866a, p. 7

Dione liciata (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Meretrix ovata ovata (Rogers), Clark and Martin, 1901, p. 168, pl. 34, figs. 1, 1a

Not *Macrocallista* cf. *ovata* (Rogers), Dall, 1916, pp. 488, 500

Pitaria (Pitaria) ovata (Rogers), Palmer, 1927/1929, p. 11, pl. 4, figs. 3, 4, 20; Brann and Kent, 1960, p. 703

Pitar ovata (Rogers), Vokes, 1961, p. 50, pl. 10, figs. 3, 4

Range.—Lower Eocene. Nanjemoy fm. (type). Middle Eocene S.C. (Richards)

Localities.—VA.: *Prince George Co.*, Coggins Point, James R. (type); *Hanover Co.*, Newcastle, S. side Pamunkey R.; Marlborough; *King George Co.*, [just below] Potomac Cr. N.C.: *Johnson Co.*, about 3 mi. W. of Clayton. MD.: *Charles Co.*, E. and W. of Port Tobacco; Pope Creek; 1-2½ mi. above Popes Cr.; ½ mi. below Chapel Point; head of Nanjemoy Cr.; *Prince Georges Co.*, Upper Marlboro (deep cut near Chesapeake Beach R.R. Station); Upper Marlboro (SW. of town near forks of roads); 1 mi. SE. of Piscataway

Type.—Holotype probably MCZ. Holotype, *Cytherea liciata* Conrad missing ANSP, Moore, 1962, p. 69

Pitar ovalis (Whitfield)**Veneridae**

Cyprina Morrisii [Sowerby] in Conrad, 1865f, p. 73; Conrad, 1865h, p. 268 not *Cyprina morrisi* J. de C. Sowerby, 1841, p. 20, pl. 620, figs. 1-6

Caryatis Delawareensis Conrad, 1868, p. 731; Conrad, 1869b, p. 41, pl. 1, fig. 6 (not *Dione Delawareensis* Gabb, 1860a, p. 302 [not p. 312 as in Whitfield], pl. 48, fig. 19=*Crassatella*)

Caryatis ovalis Whitfield, 1885, p. 237, pl. 30, figs. 15, 16 included Conrad's preoccupied name; Whitfield, 1899, p. 155

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr. *Localities*.—N.J.: Monmouth Co., Shark R. (type), "Dr. Kneiskern's pits"; Squankum; near Farmingdale

Types.—*Caryatis ovalis* Whitfield, holotype, No. 7809 State Mus., Trenton, N.J.

Pitar (Calpitar) petropolitanus Stenzel and Krause**Veneridae**

Meretrix texacola Harris, 1895a, p. 50 in part, not pl. 2, figs. 5, 5a, 5b; Harris, 1919, p. 142 in part, pl. 45, fig. 1 only; Renick and Stenzel, 1931, p. 104, in part, loc. 1 only

Pitaria (Pitaria) texacola (Harris), Palmer, 1927/1929, p. 15 in part, not pl. 2, figs. 18, 19. See *Pitar* sp.; see also *P. texacola* (Harris)

Pitar (Calpitar) petropolitanus Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 143, pl. 17, figs. 3-8

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 145)

Locality.—TEXAS: Burtleson Co., Stone City Bluff, Brazos R. (type)

Types.—Holotype, No. 20186 BEG, paratypes, No. 20771 BEG (figs. 3, 4), No. 20772 BEG (figs. 7, 8)

Pitar poulsoni (Conrad)**Veneridae**

Cytherea Poulsoni Conrad, 1833b, p. 36, not pl. 19, fig. 1 as in text, (Harris reprint, 1893, p. 58, pl. 20, fig. 7); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Tuomey, 1858, p. 265; de Gregorio, 1890, p. 218, pl. 34, fig. 11 copy Conrad, figs. 12, 13; Harris, 1895b, p. 36

Cytherea globosa Lea, 1833, p. 65, pl. 2, fig. 40; Conrad, App. in Morton, 1834, p. 8=*C. poulsoni* Conrad; H. C. Lea, 1849, p. 99; Tuomey, 1858, pp. 265, 274; Harris, 1895b, p. 21 (= *C. poulsoni* Conrad)

Venus Poulsoni (Conrad), d'Orbigny, 1850, p. 380

Dione Poulsoni (Conrad), Conrad, 1865a, p. 6; Conrad, 1866a, p. 7

Meretrix poulsoni (Conrad), Conrad, 1854, p. 30; Cossmann, 1893, p. 10; Harris, 1919, p. 144, pl. 46, figs. 3-5; Brann and Kent, 1960, p. 546

Pitaria poulsoni (Conrad), Palmer, 1927/1929, p. 15, pl. 3, figs. 9-12; Brann and Kent, 1960, p. 703

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (9), No. 30518 ANSP, Moore, 1962, p. 88. ["Holotype" Harris, 1919, Palmer, 1927]

Pitar pteleinus (Gardner)**Veneridae**

Callocardia pteleina Gardner, 1935, p. 183, pl. 17, fig. 3; pl. 19, figs. 1-3

Callocardia (*Agriopoma* ?) sp. cf. *C. pteleina* Gardner, Gardner, 1945, p. 116, pl. 5, figs. 7, 12, 13

Not *Callocardia* or *Agriopoma*, hinge not accessible.

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Uvalde Co.*, USGS Sta. 11765 Schuddemagen ranch, 11 mi. S. of Sabinal (type). For further localities in Medina and Uvalde Co., see Gardner, 1935, p. 184. MEXICO: Gardner, 1945, p. 116 compared specimens to this species.

Types.—Holotype and paratype, No. 370921 USNM

Pitar (Pitar) pyga (Conrad)**Veneridae**

Cytherea pyga Conrad, 1845b, p. 174; Conrad, 1848b, p. 131, pl. 14, fig. 18; H. C. Lea, 1849, p. 99; not Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); not Hilgard in Hopkins, 1871, p. 11

Meretrix pyga (Conrad), Conrad, 1854, p. 30

Dione pyga (Conrad), Conrad, 1865a, p. 6

Cytherea ovata Rogers, Clark, 1895, p. 5 in part; Clark, 1896, p. 76 in part, pl. 16, figs. 1a-1f

Meretrix ovata var. *pyga* (Conrad), Clark and Martin, 1901, p. 169, pl. 34, figs. 2, 2a, 3, 3a, 4, 5; Harris, 1919, p. 141, pl. 44, fig. 11; Brann and Kent, 1960, p. 545

Pitaria (Pitaria) pyga (Conrad), Palmer, 1927/1929, p. 11, pl. 4, figs. 9, 11, 17; Brann and Kent, 1960, p. 704

Pitar ovata pyga (Conrad), Vokes, 1961, p. 191

Range.—Paleocene. Aquia fm. (type)

Localities.—VA.: *Stafford Co.*, Potomac R. (type); Potomac Cr.; Aquia Cr.; W. *Hanover Co.*, Ratcliff; *King George Co.*, mouth of Paspotansa Cr.; 2 mi. below Potomac Cr.; *Prince George Co.*, near City Point. MD.: *Prince Georges Co.*, Fort Washington; Upper Marlboro, Brooks Estate near Seat Pleasant; 2 mi. W. of Collington; *Charles Co.*, Glymont; Mattawoman (?); Liverpool Point; Clifton Beach; Reedy Run (branch of Chickomuxen Creek); 1 mi. SE. of Mason Springs; [?] *Co.*, 1 mi. NE. of Grimesville

Type.—Probably holotype, No. 30640 ANSP, Moore, 1962, p. 91

Pitar ? ripleyanus (Gabb)**Veneridae**

Venus Ripleyana Gabb, 1860d, p. 393, pl. 68, fig. 22

Meretrix ripleyana (Gabb), Harris, 1896, p. 67, pl. 6, figs. 6, 7 (?); Brann and Kent, 1960, p. 546

? *Pitaria ripleyana* (Gabb), Palmer, 1927/1929, p. 9, pl. 3, figs. 14 copy Gabb, 15 copy Harris

Range.—Paleocene. Midway gr. (type)

Localities.—TEXAS: *Kaufman Co.*, 4 mi. NE. of Kemp (Harris). TENN.: *Hardeman Co.* (type), 2 mi. SSE. of Middleton; 2 mi. E. of Middleton; Muddy Cr.; 3 mi. W. of Crainesville. GA.: [?] *Co.*, Chattahoochee R. to mouth of Sandy Cr. (Harris). ALA.: *Wilcox Co.*, cuts N. of Snow Hill (Harris)

Type.—Holotype, ANSP

Pitar (Pitar) securiformis (Conrad)**Veneridae**

Dione securiformis Conrad, 1865b, p. 137, pl. 10, fig. 1; Conrad, 1866a, p. 24

Pitaria (Pitaria) securiformis (Conrad), Palmer, 1927/1929, p. 17, pl. 2, figs. 12, 14-16, 20 [figs. 16 & 20 mutations]; Brann and Kent, 1960, pp. 705, 706

Pitaria securiformis (Conrad) ?, Kellum, 1926, p. 24

Callocardia (Agriopoma) sp. cf. *C. (A.) securiformis* (Conrad), Gardner, 1945, p. 120 in part

Pitar securiformis (Conrad), Harris and Palmer, 1946, p. 94, pl. 21, figs. 1-3; Brann and Kent, 1960, p. 693

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type); Yazoo clay, upper Jackson gr.; Danville Ldg. beds, uppermost Jackson gr.

Localities.—ARK.: *Cleveland Co.*, Vince Bluff, Saline R. MISS.: *Clarke Co.*, "Enterprise"—Garland Cr. (type) *fide* Aldrich 1885c, p. 307; *Hinds Co.*, Jackson; *Yazoo Co.*, Sims Siding, N. of Yazoo City. LA.: *Catahoula Par.*, Danville Ldg., Ouachita R.; *Caldwell Par.*, Bunker Hill, Ouachita R.; ½ mi. below Gibson's Ldg., Ouachita R.

Type.—Possible syntype ?, No. 13216 ANSP, not specimen figured by Conrad, Moore, 1962, p. 95

Pitar cf. subimpressa (Conrad), Harris, 1951

See Cf. "*Pitar*" sp.

Pitar (Calpitar) texacola (Harris)**Veneridae**

Meretrix texacola Harris, 1895a, p. 50 in part, pl. 2, figs. 5, 5a, not 5 b (= *P. tornadonis*); Harris, 1919, p. 142 in part, pl. 44, figs. 13, 14, not 12, 12a, 15; not pl. 45, figs. 1-3; not Renick and Stenzel, 1931, p. 104, no. 7; not Brann and Kent, 1960, p. 547

Pitaria (Pitaria) texacola (Harris), Palmer, 1927/1929, p. 15 in part, pl. 2, fig. 19, not fig. 18; not Brann and Kent, 1960, p. 706, No. 1589

Pitar (Calpitar) texacola (Harris), Stenzel, Krause, and Twining, 1957, p. 145, pl. 18, figs. 3, 4; pl. 22, figs. 7-9

Range.—Middle Eocene. Tyus mem. (type), Weches fm.; Vieska mem., Weches fm., middle Claiborne gr.

Localities.—TEXAS: *Cherokee Co.*, Berryman's place, H. Kimble headright, about 4 mi. NE. of Alto (Bur. Ec. Geol. loc. no. 37-T-6) (type). See Stenzel, Krause, and Twining, 1957, p. 147; *Bastrop Co.*, Smithville, Colorado R.

Type.—Holotype, No. 20185 BEG

Pitar (Calpitar) texibrazus Stenzel and Krause**Veneridae**

Pitar (Calpitar) texibrazus Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 147, pl. 18, figs. 1, 2

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Type.—Holotype, No. 20565 BEG

Pitar (Calpitaria) tornadonis (Harris)**Veneridae**

Meretrix texacola Harris, 1895a, p. 50, in part, pl. 2, fig. 5b only;
Renick and Stenzel, 1931, p. 104 in part, loc. 2, 3, 4, not loc. 1

Meretrix texacola var. *tornadonis* Harris, Harris, 1919, p. 142 in part,
pl. 45, fig. 2, fig. 3 (type)

Pitaria (Pitaria) texacola (Harris), Palmer, 1927/1929, p. 15 in part,
not pl. 2, figs. 18, 19

Pitaria (Pitaria) texacola tornadonis (Harris), Palmer, 1927/1929, p.
16 in part, not pl. 2, figs. 7, 21=*Pitar* sp.; not Brann and Kent, 1960,
p. 706=*Pitar* sp.

Callocardia (Agriopoma) tornadonis (Harris), Gardner, 1945, p. 117,
pl. 9, figs. 24, 25

Pitar (Calpitaria) tornadonis (Harris), Stenzel, Krause, and Twining,
1957, p. 148, pl. 17, figs. 11, 12 type, 13, 14, not 9, 10

Cytherea texacola (Harris), Gimbrede, 1962, p. 1119

Cytherea tornadonis (Harris), Gimbrede, 1962, p. 1117

Range.—Middle Eocene. Hurricane lentil (type), base Landrum
mem., Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: *Houston Co.*, S. fork of Hurricane Bayou
(Bur. Ec. Geol., No. 113-T-2) (type) *fide* Stenzel, Krause, and
Twining, 1957, p. 150); *Fayette Co.*, Colorado R. near old
Shipp's Ford (Bur. Ec. Geol. loc. No. 11-T-29)

Type.—Holotype, No. 20184 BEG

Pitar (Calpitaria) tornadonis (Harris), Stenzel, Krause, and Twining,
1957, p. 148, in part, pl. 17, figs. 9, 10

See *Pitar (Calpitaria)* sp.

Pitar trigoniata (Lea)

See *Katherinella trigoniata* (Lea)

Pitar ? vespertinus (Conrad)**Veneridae**

Venus vespertina Conrad, 1857, p. 162, pl. 19, figs. 5, 5a; not *Cytherea*
vespertina Conrad, 1848c, p. 433 (Dall reprint, 1909, p. 151); not
Dione vespertina Conrad, 1865cc, p. 152; not *Dione vespertina* Meek,
1864, p. 10

Meretrix ? vespertina (Conrad), Harris, 1919, p. 144, pl. 46, fig. 6
copy type

? *Pitaria vespertina* (Conrad), Palmer, 1927/1929, p. 30, pl. 3, fig. 3
copy type

Range.—Eocene (type)

Locality.—TEXAS: "Western" (type)

Type.—Not in USNM, presumably lost *fide* Harris, 1919, p. 144

Pitar vetus (Whitfield)**Veneridae**

Caryatis? veta Whitfield, 1885, p. 218, pl. 28, figs. 16-19; Whitfield,
1899, p. 155; Weller, 1907, p. 611, pl. 68, figs. 11-12. Not *Bucardia*
veta Conrad, 1869b, p. 41 see *Glossus ? veta* Conrad

Range.—Lower Eocene. Mansasquan fm. (type). Cf. Middle
Eocene. Shark R. ml.

Localities.—N.J.: *Monmouth Co.*, Farmingdale (type); Squankum; cf. Shark R.; *Ocean Co.*, New Egypt

Types.—Figured specimens, fig. 16, No. 9016/3; fig. 17 not found; figs. 18, 19, No. 9016/1, AMNH

Pitar (Lamelliconcha) yoakumi (Gabb)

Veneridae

Meretrix yoakumi Gabb, 1862c, p. 370; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Harris, 1919, p. 150; Stenzel, Krause, and Twining, 1957, p. 39

Pitaria (Lamelliconcha) yoakumi (Gabb), Palmer, 1927/1929, p. 40, pl. 8, fig. 14 holotype

Range.—"Eocene." Cretaceous Woodbine gr., Cenomanian. *vide* Stenzel, Krause, and Twining, 1957, pp. 39, 40

Locality.—TEXAS: *Johnson Co.*, "a brown highly ferruginous sandstone . . . Caddo Peak" (type). "near Old Caddo P.O., on old road from Cleburne to Fort Worth, Johnson Co." (Stenzel, Krause, and Twining, 1957, p. 39).

Type.—Holotype, No. 3958 ANSP

Pitar sp.

Veneridae

Callocardia sp. Gardner, 1935, p. 186 [Not *Callocardia*]

Range.—Paleocene. Wills Point fm., upper Midway gr.

Locality.—TEXAS: *Maverick Co.*, 27 mi. SE. of Eagle Pass on the Windmill (Jacal) ranch road

Type.—Unfigured specimen not found USNM, 1962

Pitar sp.

Veneridae

Callocardia sp. Gardner, 1935, p. 186. [Not *Callocardia*]

Range.—Paleocene. Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Limestone Co.*, Comanche Crossing; *Falls Co.*, Whitaker Survey about 6 mi. NW. of Kosse; ½ mi. below Travis-Bastrop Co. line; Cribbs Bluff, Brazos R. little over a mile below Falls Co. line

Types.—Unfigured specimens not found USNM, 1962

Cf. Pitar sp.

Veneridae

Cytherea sp. Harbison, 1944, p. 6, pl. 3, fig. 3

Range.—Middle Eocene. Santee ls., upper Claiborne gr.

Locality.—S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

Type.—Figured specimen, ANSP

Pitar sp.

Veneridae

Meretrix texacola Harris, 1919, p. 144 in part, pl. 44, figs. 12, 12a; Brann and Kent, 1960, p. 547

Pitaria (Pitaria) texacola (Harris), Palmer, 1927/1929, p. 16 in part, pl. 2, fig. 18; Brann and Kent, 1960, p. 706

This shell deserves a new name but we prefer not to present a new name without further critical study.

Range.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

Types.—Figured specimens, Nos. 1177, 1178 PRI

Pitar sp.**Veneridae**

Meretrix texacola ? Harris, Harris, 1919, p. 142, in part, pl. 44, fig. 15

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: Calhoun Co., Keitts [Kitt's] Ravine, 4½ mi. NW. of Creston (type)

Type.—Figured specimen missing USNM prior to 1962

Pitar spp. or Callista spp.**Veneridae**

Meretrix sp. close to *M. poulsoni* Conrad, Harris, 1919, p. 144

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Localities.—N.C.: Craven Co., Newbern age not determined. GA.: Burke Co., Shell Bluff

Types.—Specimens not available

Pitar sp.**Veneridae**

Pitar cf. *cornelli* (Harris), Harris, 1951, p. 22, pl. 11, figs. 4, 5; Brann and Kent, 1960, pp. 691, 692

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: Houston Co., Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry

Types.—Figured specimens, Nos. 24502, 24503 PRI

Cf. "Pitar" sp.**Veneridae**

Pitar cf. *subimpressa* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 6-8. Brann and Kent, 1960, p. 694. Not *Macrocallista subimpressa* (Conrad)

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Localities.—GA.: Houston Co., Georgia Lime Rock Quarry, U.S. Rte. 41, Perry; Pennsylvania Cement Corp., Plant 2, Clinchfield Quarry

Types.—Figured specimens, Nos. 24504-24506 PRI

Pitar (Calpitaria) sp.**Veneridae**

Pitar (Calpitaria) tornadonis (Harris), Stenzel, Krause, and Twining, 1957, p. 148 in part, pl. 17, figs. 9, 10

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: Fayette Co., 4 mi. E. of Smithville, near abandoned Shipp's Ford (see Stenzel, Krause, and Twining, 1957, p. 210)

Type.—Figured specimen, No. 20769 BEG

Pitar sp.**Veneridae**

Pitar sp. Harbison, 1944, p. 6, pl. 3, fig. 4

Range.—Middle Eocene. Santee ls., upper Claiborne gr.

Locality.—S.C.: Berkeley Co., Santee-Cooper Canal, 17 mi NW. of Moncks Corner

Type.—Figured specimen, ANSP

Pitar sp.**Veneridae**

Pitar sp. cf. *nuttali* (Conrad), Harris, 1951, p. 22, pl. 11, figs. 1, 2;
Brann and Kent, 1960, p. 692

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Localities.—GA.: Houston Co., Clinchfield Quarry. FLA.: Marion Co., near Kendrick

Type.—Figured specimens, Nos. 24499, 24500 PRI

Pitar (Calpitaria) sp.**Veneridae**

Pitaria (*Pitaria*) *texacola tornadonis* (Harris), Palmer, 1927/1929, p. 16 in part, pl. 2, figs. 7, 21; Brann and Kent, 1960, p. 706

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.

Types.—Figured specimens, Nos. 1580, 1590 PRI

Pitaria (*Pitaria*) *angelinae* (Harris)

See *Pitar angelinae* (Harris)

Pitaria astartoides (Gardner)

See *Rhabdopitaria astartoides* (Gardner)

See also *Rhabdopitaria pricei* Palmer

Pitaria (*Pitaria*) *cornelli* (Harris)

See *Pitar (Pitar) cornelli* (Harris)

Pitaria (*Pitaria*) *eversa* (Conrad)

See *Pitar eversus* (Conrad)

? *Pitaria exigua* (Conrad)

See *Pitar ? exiguus* (Conrad)

Pitaria gazleyensis Palmer

See *Pitar gazleyensis* (Palmer)

Pitaria juliae Palmer

See *Pitar juliae* (Palmer)

Pitaria (*Pitaria*) *lenis* (Conrad)

See *Pitar lenis* (Conrad)

Pitaria (*Lamelliconcha*) *macbeani* Harris

See *Pitar (Lamelliconcha) macbeani* (Harris)

Pitaria (*Pitaria*) *nuttali* (Conrad)

See *Pitar (Pitar) nuttali* (Conrad)

Pitaria (*Pitaria*) *nuttalliopsis* (Heilprin)

See *Pitar (Pitar) nuttalliopsis* (Heilprin)

Pitaria (*Pitaria*) *nuttalliopsis fulva* (Harris)

See *Pitar (Pitar) nuttalliopsis fulvus* (Harris)

Pitaria (*Pitaria*) *nuttalliopsis greggi* (Harris)

See *Pitar (Pitar) nuttalliopsis greggi* (Harris)

Pitaria (*Pitaria*) *nuttalliopsis heilprini* Palmer

See *Pitar (Pitar) nuttalliopsis heilprini* (Palmer)

Pitaria (Pitaria) ovata (Rogers)See *Pitar (Pitar) ovatus* (Rogers and Rogers)*Pitaria poulsoni* (Conrad)See *Pitar poulsoni* (Conrad)*Pitaria (Rhabdopitaria) pricei* PalmerSee *Rhabdopitaria pricei* Palmer*Pitaria (Pitaria) pyga* (Conrad)See *Pitar (Pitar) pyga* (Conrad)*Pitaria ripleyana* (Gabb)See *Pitar ? ripleyanus* (Gabb)*Pitaria (Pitaria) securiformis* (Conrad)See *Pitar (Pitar) securiformis* (Conrad)*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927/1929See *Pitar* sp.See also *Pitar (Calpitaria) tornadonis* (Harris)*Pitaria (Pitaria) texacola* (Harris), Palmer, 1927See *Pitar (Calpitaria) petropolitanus* Stenzel and KrauseSee also *Pitar (Calpitaria) texacola* (Harris)See also *Pitar* sp.*Pitaria (Pitaria) texacola tornadonis* (Harris) in partSee *Pitar (Calpitaria)* sp.See also *Pitar (Calpitaria) tornadonis* (Harris)*Pitaria (Lamelliconcha) trigoniata* (Lea)See *Katherinella trigoniata* (Lea)*Pitaria (Lamelliconcha) trigoniata bastropensis* (Harris)See *Katherinella ? trigoniata bastropensis* (Harris)See also *Katherinella ?* sp.See also *Pitar "(Agriopoma)" amichel* Gardner*Pitaria ? vespertina* (Conrad)See *Pitar ? vespertinus* (Conrad)*Pitaria (Rhabdopitaria) winnensis* (Harris)See *Rhabdopitaria winnensis* (Harris)*Pitaria (Lamelliconcha) yoakumi* (Gabb)See *Pitar (Lamelliconcha) yoakumi* (Gabb)*Plagiocardium (Schedocardia) hatchetigbeense* (Aldrich)See *Acanthocardia (Schedocardia) hatchetigbeensis* (Aldrich)**Cf. Plagiocardium** sp.**Cardiidae***Cardium tuomeyi* Aldrich var. Harris, 1899b, p. 303, pl. 53, figs. 9, 10*Cardium (Cerastoderma) tuomeyi* Aldrich var. Barry, 1942+, p. 66, pl.8, figs. 4-6; not pl. 9, fig. 1 see *Acanthocardia tuomeyi* (Aldrich);

Wasem and Wilbert, 1943, p. 192, pl. 31, fig. 4

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.*Localities*.—LA.: Natchitoches Par., Marthaville; Sabine Par., La Nana Bayou near Many. For localities in Natchitoches Par.

and Sabine Par. see Barry, 1942+, p. 67. TEXAS: Sabine Co., Pendleton (Harris)

Type.—Figured specimen by Harris lost prior to 1937, PRI

Plagiostoma dumosum Morton

See *Spondylus dumosus* (Morton)

Plagiostoma dumosum Morton, Conrad, 1834; Aldrich, 1885c, 1886

See *Spondylus* sp.

Pleuromeris aldrichi Harris

See *Venericardia* (*Pleuromeris*) *aldrichi* Harris

Plicatula filamentosa Conrad

Plicatulidae

Plicatula filamentosa Conrad, 1833b, p. 38 [not illus.], (Harris, reprint 1893, p. 60); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 105; d'Orbigny, 1850, p. 394; Conrad, 1865a, p. 14; Conrad, 1866a, p. 3; Aldrich, 1886, p. 49; de Gregorio, 1890, p. 179, pl. 21, figs. 1-10, fig. 11 copy *P. mantelli* Lea; Cossmann, 1893, p. 18; Harris, 1895b, p. 19; Dall, 1898b, p. 762; Harris, 1919, p. 18, pl. 12, figs. 3-8; Harris and Palmer, 1946, p. 25 in part, not pl. 6, figs 1, 1a Jackson Eocene, see *Plicatula* sp.; not Harris, 1951, p. 7; Brann and Kent, 1960, pp. 720, 721 in part

Plicatula Mantilli [sic] Lea, 1833, p. 89, pl. 3, fig. 68 [incorrectly spelled *Mantilli*, named for Mantell]

Plicatula Mantelli Lea, H. C. Lea, 1849, p. 105; Tuomey, 1858, p. 267; Harris, 1895b, p. 27=*P. filamentosa* Conrad

Spondylus amussiopse de Gregorio, 1890, p. 179, pl. 20, figs. 11-13; Dall, 1898b, p. 761=young of *Plicatula filamentosa* Conrad

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.; Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Missing ANSP, Moore, 1962, p. 60

Plicatula filamentosa Conrad, Kellum 1926, p. 21; Harris and Palmer, 1946, p. 25 in part; Richards, 1950, p. 18; Harris, 1951, p. 7

See *Plicatula* spp.

Plicatula filamentosa Conrad "var."

Plicatulidae

Plicatula filamentosa Conrad var., Harris, 1897b, p. 41 in part, pl. 6, figs. 8, 9; Brann and Kent, 1960, pp. 720, 721

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R.

Types.—Figured specimens No. 218, 219 PRI

Plicatula filamentosa Conrad "var."

Plicatulidae

Plicatula filamentosa Conrad var. Renick and Stenzel, 1931, p. 93, pl. 7, figs. 26-28

Range.—Middle Eocene. Crockett fm., [Cook Mt. fm.], upper Claiborne gr.

Locality.—TEXAS: Brazos Co., Little Brazos R., near old inter-urban crossing

Types.—Figured specimens, No. 21308, BEG (fig. 26), No. 21309 BEG (fig. 27), No. 21310 BEG (fig. 28)

Plicatula filamentosa concentrica Dall**Plicatulidae**

Plicatula filamentosa concentrica Dall, 1898b, p. 762; Schuchert, *et al.*, 1905, p. 525; Harris, 1919, p. 19, pl. 12, figs. 9-12; Brann and Kent, 1960, pp. 721, 722

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS; *Cherokee Co.*; *Anderson Co.*, *Houston Co.*;

Robertson Co. LA.: *Sabine Par.*, Columbus; Negreet. MISS.:

Clarke Co., Wautubbee ["Wautubbee Hills"] (type)

Type.—Holotype, No. 139082 USNM

Plicatula filamentosa planata Meyer and Aldrich**Plicatulidae**

Plicatula planata Meyer and Aldrich, 1886, p. 45, pl. 2, fig. 20

Plicatula filamentosa planata Meyer and Aldrich, Dall, 1898b, p. 762 as mutation *P. filamentosa* Con.; Harris, 1919, p. 19, pl. 12, figs. 13-17 Meyer and Aldrich, not Aldrich; Brann and Kent, 1960, p. 722

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, Wautubbee; *Newton Co.*, Hickory;

Newton (type). LA.: *Winn Par.*, Cooper's Well depth 1000 ft.,

Winnfield; St. Maurice

Type.—Holotype, No. 638744 USNM

Plicatula ? louisiana Harris**Plicatulidae**

Plicatula (?) *louisiana* Harris in Harris and Palmer, 1946, p. 24, pl. 5, figs. 5, 5a; Brann and Kent, 1960, p. 722

Range.—Upper Eocene. Jackson gr. (type)

Locality.—LA.: *Grant Par.*, Montgomery Bluff, upper layer

Red R. (type)

Type.—Holotype, No. 4149 PRI. Lost prior to 1957

Plicatula Mantelli Lea [*Mantilli* sic]

See *Plicatula filamentosa* Conrad

Plicatula planata Meyer and Aldrich

See *Plicatula filamentosa planata* Meyer and Aldrich

Plicatula sp.**Plicatulidae**

Plicatula? Harris, 1896, p. 47, pl. 2, figs. 2, 2a; Dall, 1898b, p. 763; Brann and Kent, 1960, p. 723

Range.—Paleocene. Clayton fm., lower Midway gr.

Locality.—ALA.: *Wilcox Co.*, ½ mi. E. of McConnico's, near Palmer's mill

Type.—Figured specimen, No. 47 PRI

Plicatula sp.**Plicatulidae**

Plicatula filamentosa Conrad, Kellum, 1926, p. 21, pl. 2, figs. 5, 6; Richards, 1950, p. 18. Not Conrad, 1833b

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Localities.—N.C.; *New Hanover Co.*, Wilmington; *Onslow Co.*, 10 mi. N.W. of Jacksonville

Types.—Figured specimens, Nos. 353237 (fig. 5), 353290 (fig. 6) USNM

Plicatula spp.**Plicatulidae**

Plicatula filamentosa Conrad, Harris and Palmer, 1946, p. 25, pl. 6, figs. 1 not Jackson, Miss., 1a; Harris, 1951, p. 7, pl. 2, figs. 6-9; Brann and Kent, 1960, p. 721 in part. Not Conrad, 1833b

Range.—Upper Eocene. Jackson gr. and Ocala gr.

Localities.—ALA.: *Choctaw Co.*, W. of Silas and 1 mi. E. of old Fail Post Office. LA.: *Caldwell Par.*, Bunker Hill Ldg., Ouachita R. FLA.: *Marion Co.*, E. of Kendrick. GA.: *Lee Co.*, Armena Lime Mines, Armena

Types.—Figured specimens, Nos. 4150, 4151, 24439-24442 PRI

Polorthus americanus (Gabb)

See *Kummelia americana* (Gabb)

Polorthus tibialis (Morton)**Teredinidae**

Teredo tibialis Morton, 1834, p. 68, pl. 9, fig. 2; Gabb, 1861, p. 230; Meek, 1864, p. 16; Whitfield, 1885, p. 201, pl. 26, figs. 19-22; Whitfield, 1899, p. 165; Johnson, 1905, p. 18

Polorthus tibialis (Morton), Gabb, 1862b, p. 366; Stoliczka, 1871, p. 14; Gabb, 1872, p. 259, pl. 8, figs. 1-7; Weller, 1907, p. 659, pl. 74, figs. 12-15

Range.—Lower Eocene. Vincentown fm. (type)

Localities.—N.J.: *Ocean Co.*, near New Egypt; *Gloucester Co.*, near Hurffville; boundary between *Gloucester* and *Camden Cos.*, Timber Creek (type)

Type.—ANSP (Johnson, 1905)

Poromya mississippiensis Meyer and Aldrich**Poromyidae**

Poromya mississippiensis Meyer and Aldrich in Meyer, 1887a, p. 10, pl. 2, figs. 1, 1a, 1b; Dall, 1903a, p. 1508; Harris and Palmer, 1946, p. 118, pl. 25, figs. 3-5; Brann and Kent, 1960, p. 734 (not Aldrich and Meyer as in Harris and Palmer; Brann and Kent)

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); *Clarke Co.*, Garland Creek

Types.—Syntypes fig. 1 (upper), No. 638883 USNM; figs. 1 (lower), 1b, No. 638884 USNM

Propeamussium alabamense (Aldrich)

See *Amusium (Propeamussium) alabamense* (Aldrich)

Protocardia actia Gardner

See *Nemocardium actium* (Gardner)

Protocardia (um) curta (um) Conrad

See *Nemocardium curtum* (Conrad)

Protocardia diversa (Conrad), Gabb, 1862c

See *Nemocardium gambrinum* (Gabb)

Protocardia gambrina Gabb

See *Nemocardium gambrinum* (Gabb)

Protocardia gambrina harrisi Dall, Brann and Kent

See *Nemocardium gambrinum* (Gabb)

See also *Nemocardium harrisi* (Dall)

Protocardia harrisi DallSee *Nemocardium harrisi* (Dall)*Protocardia lenis* (Conrad)See *Nemocardium lene* (Conrad)*Protocardia lenis* (Conrad), Clark and MartinSee *Nemocardium* sp.*Protocardia lenis* var. Harris, 1897b not Conrad, 1856aSee *Nemocardium harrisi* (Dall)*Protocardia lima* ConradSee *Nemocardium nicolletti* (Conrad)*Protocardia nicolletti* (Conrad)See *Nemocardium nicolletti* (Conrad)*Protocardia nicolletti* (Conrad) var. Aldrich, 1886 not Conrad, 1841See *Nemocardium harrisi* (Dall)*Protocardia nicolletti* Conrad var. Harris, 1896See *Nemocardium*, n. sp.*Protocardia quihi* GardnerSee *Nemocardium quihi* (Gardner)*Protocardia salrivalis* HarrisSee *Nemocardium salrivale* (Harris)*Protocardia virginiana* ConradSee *Nemocardium lene* (Conrad)*Protocardia virginiana* Harris, 1897a, not Conrad, 1864See *Nemocardium harrisi* (Dall)*Protocardia* sp.See *Nemocardium* sp.**"Protocardia" sp.****Cardiidae***Protocardia* sp. Harris, 1894b, p. 44, pl. 1, fig. 4*Range*.—Paleocene. Clayton fm., lower Midway gr.*Localities*.—ARK.: *Pulaski Co.*, Fourche Cr., near mouth Crooked Cr., near Alexander (Harris, pp. 28, 44); Dr. Johnson's well, top Capitol Hill, Battery & 9th Sts., Little Rock (Harris, p. 26); Ulrich coll. (Harris, 1894b)*Type*.—Figured specimen (USNM, 1894)*Psammobia*=*Gari* or *Garum**Psammobia blainvillii* (Lea) [*blainvillei*]See *Gari* (*Gobraeus*) *blainvillii* (Lea)*Psammobia* (*Garum*) *claibornensis* DallSee *Garum claibornense* Dall*Psammobia eborea* Conrad, Brann and Kent error for *Egerella triangulata* (Lea)See *Egerella limatula* (Conrad)

Psammobia eborea Conrad
See *Gari eborea* (Conrad)

Psammobia eborea (Conrad), Heilprin, 1884b
See *Gari (Gobraeus) blainvillii* (Lea)

Psammobia filosa Conrad
See *Garum filiosum* (Conrad)

Psammobia harrisi Aldrich
See *Gari harrisi* (Aldrich)

Psammobia ozarkana Harris
See *Gari (Gobraeus) ozarkana* (Harris)

Psammobia (Gobraeus) papyria Conrad, Dall, 1898c, p. 60. Not *Psammobia papyria* Conrad, 1848a, p. 291=Vicksburg Oligocene

Psammobia Smithi Aldrich
See *Gari smithi* (Aldrich)

Pseudamussium calvatum (Morton)
See *Eburneopecten calvatus* (Morton)

Pseudamussium claibornense Harris
See *Eburneopecten corneoides* (Harris)

Pseudamussium frontalis Dall
See *Eburneopecten frontalis* (Dall)

Pseudochama harrisi Gardner
See *Chama harrisi* (Gardner)

Pseudochama sp.

Chamidae

Chama sp. Harris, 1919, p. 131, pl. 41, fig. 4

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: Lee Co., between Orell's Crossing and Evergreen Crossing of Elm Cr. (see Stenzel, Krause, and Twin-ing, 1957, p. 44)

Type.—Figured specimen (originally Texas State Museum). Missing, 1963

Pseudomiltha megameris Dall

Lucinidae

Lucina (Pseudomiltha?) megameris Dall, 1901b, p. 40

Phacoides (Pseudomiltha) megameris Dall, Dall, 1901c, pp. 806, 829, pl. 42, fig. 1

Cf. *Pseudomiltha megameris* Dall, Richards and Palmer, 1953, p. 48, pl. 10, fig. 6

Range.—Cf. Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Gibraltar ls. (type) Butterlin, 1956; Inglis fm. lower Ocala gr. (Richards)

Localities.—JAMAICA, W.I.: *St. Ann's Par.*, [Clairmont sic] Clarendon (type). cf. FLA.: *Levy Co.*, sec. 14, T. 14 S., R. 15 E., Dunnellon Phosphate Mining Co., SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 10, T. 18 S., R. 19 E.

Types.—[Syntypes?] lectotype herein designated, No. 147592 USNM

Pteria ? annosa (Conrad)**Pteriidae**

Avicula annosa Conrad, 1865e, p. 214, pl. 20, fig. 16; Conrad, 1866a, p. 4; Conrad, 1868, p. 731 not "Meek, 1868, p. 731" as Whitfield, 1885 p. 226; Whitfield, 1885, p. 226, pl. 29, fig. 9; Dall, 1898b, p. 669 regarded as gastropod; Whitfield, 1899, p. 154

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, State Mus., Trenton, N.J.

"Pteria cf. argentea" (Conrad)**Pteriidae**

Avicula argentea Conrad, 1848a, p. 295; Conrad, 1848b, p. 126, pl. 12, fig. 10 Vicksburg Oligocene

Pteria cf. argentea (Conrad), Harris, 1951, p. 13, pl. 6, fig. 6; Brann and Kent, 1960, p. 752. Compared with Vicksburg species.

Range.—Upper Eocene. "Ocala ls.", Ocala gr. Oligocene. Vicksburg (type)

Locality.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, about 4 mi. from Perry

Type.—Figured specimen, No. 24466 PRI "Ocala ls."

Pteria deusseni Gardner**Pteriidae**

Pteria deusseni Gardner, 1935, p. 134, pl. 7, fig. 8; Stenzel, Krause, and Twining, 1957, p. 82

Pteria sp. cf. *P. deusseni* Gardner, Gardner, 1945, p. 59 Mexico

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Limestone Co.*, U.S.G.S. Sta. 6559, Comanche Crossing on Navasota Cr., about 6 mi. W. of Mexia (type)

Type.—Holotype, No. 370964 USNM

Pteria limula (Conrad)**Pteriidae**

Avicula limula Conrad, 1833c, p. 39 (Harris reprint, 1893, p. 65); Conrad, App. in Morton, 1834, p. 6; H. C. Lea, 1849, p. 96; d'Orbigny, 1850, p. 392; Conrad, 1865a, p. 11; Conrad, 1866a, p. 4; Harris, 1895b, p. 24; Dall, 1898b, p. 669; Teppner, 1914, p. 6

Avicula claibornensis Lea, 1833, p. 86, pl. 3, fig. 65; Conrad, App. in Morton, 1834, p. 6=*A. limula* Conrad; H. C. Lea, 1849, p. 96; Tuomey, 1858, pp. 264, 273; de Gregorio, 1890, p. 183, pl. 22, fig. 4 copy Lea; Cossmann, 1893, p. 18=*A. cardincrassa*; Harris, 1895b, p. 10=*A. limula*; Dall, 1898b, p. 669

Avicula cardincrassa de Gregorio, 1890, p. 184, pl. 22, figs. 1-2; Dall, 1898b, p. 669

Pteria limula (Conrad), Dall, 1898b, p. 669; not Clark and Martin, 1901, p. 194, pl. 51, fig. 1; Harris, 1919, p. 29 in part, pl. 16, figs. 3-7, not 2-3 as in expl.; not Shimer and Shrock, 1944, p. 391, pl. 152, fig. 9 copy Clark and Martin; Gardner, 1945, p. 59 in part; Stenzel, Krause, and Twining, 1957, p. 82, pl. 7, figs. 10-13; Brann and Kent, 1960, p. 752

Pteria trigona (Conrad) (not Lamarek), Dall, 1898b, p. 669. Not *Avicula trigonata* Lamarek, 1819, p. 150 probably name meant by Conrad, 1842b, p. 175, "*Avicula trigona*."

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, "Claiborne sands" (type)=Claiborne Bluff, Alabama R.; Rock Branch near Monroeville (Tuomey); *Clarke Co.*, Little Stave Creek, near Jackson

Types.—Probable syntypes (2), No. 30540 ANSP, Moore, 1962, p. 70

Pteria limula (Conrad), Harris, 1919, p. 30 in part
See *Pteria* sp.

Pteria limula (Conrad), Clark and Martin, 1901; Shimer and Shrock, 1944
See *Pteria* sp.

***Pteria limula vanwinkleae* Harris**

Pteriidae

Pteria limula vanwinkleae Harris in Harris and Palmer, 1946, p. 37, pl. 10, figs. 1-4; Stenzel, Krause, and Twining, 1957, p. 82; Brann and Kent, 1960, p. 753

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson, Moodys Branch (type).
LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, Gibsons Ldg., Ouachita R.; *Sabine Par.*, "Jackson beds on the Sabine River."

Types.—Holotype, No. 4182; paratypes, Nos. 4183, 4184 PRI

***Pteria (Pteria) petropolitana* Stenzel and Twining**

Pteriidae

Pteria (Pteria) petropolitana Stenzel and Twining in Stenzel, Krause, and Twining, 1957, p. 81, pl. 7, figs. 14-15, text fig. 12

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff (type)

Type.—Holotype, No. 20687 BEG

Pteria trigona (Conrad), 1842b, not *Avicula trigonata* Lamarck, 1819, p. 150
See *Pteria limula* (Conrad)

***Pteria* sp.**

Pteriidae

? *Pteria limula* (Conrad), Harris, 1919, p. 30 in part

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: *Houston Co.*, Crockett

Type.—Specimen, Coll. Univ. Texas, probably lost

***Pteria* sp.**

Pteriidae

Avicula limula Conrad, Aldrich, 1886, p. 54. Not Conrad, 1833c, p. 39
Avicula sp. Harris, 1897b, p. 46, pl. 7, fig. 7, 7a; Brann and Kent, 1960, p. 111

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

Type.—Figured specimen, Harris, No. 190 PRI

Pteria sp.

Avicula sp. Harris, 1896, p. 48, pl. 2, figs. 4, 4a; Dall, 1898b, p. 669; Brann and Kent, 1960, p. 111

Range.—Paleocene. Midway gr.

Locality.—GA.: *Clay Co.*, mouth of Sandy Creek, Chattahoochee R.

Type.—Figured specimen, No. 48 PRI

Pteriidae**Pteria sp.**

Pteria limula (Conrad), Clark and Martin, 1901, p. 194, pl. 51, fig. 1 probably not of Conrad; Shimer and Shrock, 1944, p. 391, pl. 152, fig. 9 copy of Clark and Martin

Range.—Paleocene. Aquia fm. Lower Eocene. Nanjemoy fm.

Localities.—MD.: *Prince Georges Co.*, Upper Marboro; *Charles Co.*, Popes Creek; Hills Bridge.

Type.—Figured specimen, USNM

Pteriidae

Pteromeris minutissima (Lea)

See *Micromeris minutissima* (Lea)

Pteropsella lapidosa (Conrad)**Mactridae**

Lutraria lapidosa Conrad, App. in Morton, 1834, p. 8 *nomen nudum*; Conrad, 1846b, p. 215, pl. 2, fig. 7 (not pl. 1 as in text); Conrad, 1848a, p. 298; Tuomey, 1848, pp. 148, 151, 153, 157, 159, 161, 168; Conrad, 1848b, p. 129; H. C. Lea, 1849, p. 101

Lutraria petrosa Conrad, 1848a, p. 298; Tuomey, 1848, pp. 148, 151, 153, 157, 159, 161, 168

Astarte Conradi Dana, 1863, p. 516, fig. 800; Conrad, 1866a, p. 5; Heilprin, 1884a, p. 152=young of *Crassatella alta*; Heilprin, 1884b, p. 38; Aldrich, 1886, pp. 39, 48, pl. 4, fig. 7; de Gregorio, 1890, p. 202, pl. 27, fig. 35 copy Aldrich; Cossmann, 1893, p. 13

Pteropsis lapidosa (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; Harris in Dana, 1895, p. 916; Dall, 1898b, p. 881; Harris, 1919, p. 178, pl. 54, figs. 14, 15; Trowbridge, 1932, pl. 41, figs. 10, 11; Cooke, 1936, pp. 58, 64, 65; Gardner, 1945, p. 112, pl. 9, figs. 30 (as *incertae sedis*) fig. 32 Mexican; Cooke and MacNeil, 1952, p. 24; Brann and Kent, 1960, p. 753

Pteropsis Conradi (Dana), Harris in Dana, 1895, p. 897, fig. 1483 same as Dana, 1863; Vaughan, 1896, pp. 20, 48

Pteropsis harrisi Van Winkle, 1921, p. 9, pl. 1, figs. 12, 13; Stenzel, Krause, and Twining, 1957, p. 128; Brann and Kent, 1960, p. 753

Astarte ? Renick and Stenzel, 1931, p. 104 in part, loc. 4 only

Kymatox lapidosus (Conrad), Stenzel, Krause, and Twining, 1957, p. 126, pl. 15, figs. 11-14, p. 180 *Pteropsella* Vokes, 1956, p. 763

Range.—Middle Eocene. McBean fm. (type) upper Claiborne gr.; Cook Mt. fm., upper Claiborne gr.; Laredo fm. (Gardner), upper Claiborne gr.

Localities.—S.C.: *Orangeburg Co.*, Orangeburg, (type, Conrad); Vance's Ferry, Santee R. (type *fide* Stenzel, Krause, and Twining). TEXAS: *Roberston Co.*, "Campbell's" (Campbell Cr. A. Gafford hdt.); Cedar Creek (see Sta. 46, Texas). LA.: *Bossier Par.*, near Red Land; *Lincoln Par.*, Chautauqua; *Bienville Par.*, Hammetts Branch; Gibbsland (Gibbsland, Veatch, 1902). ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. For Mexican localities see Gardner, 1945, p. 112

Type.—Holotype, No. 20218 ANSP, incorrectly labelled, Moore, 1962, p. 68

Pteropsella papyria (Conrad)**Mactridae**

Lutraria papyria Conrad, 1833a, p. 41 (Harris reprint, 1893, p. 67, pl. 19, fig. 7); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 216, pl. 2 (not pl. 1 as in text), fig. 8; H. C. Lea, 1849, p. 101; Harris in Dana, 1895, p. 916; Harris, 1895b, p. 32

Mactra dentata Lea, 1833, p. 41, pl. 1, fig. 9; H. C. Lea, 1849, p. 101; de Gregorio, 1890, p. 228, pl. 36, fig. 12 copy Lea, in synonymy *Mactra decisa*; Harris, 1895b, p. 15

Pteropsis papyria (Conrad), Conrad [not Gabb as in Harris, 1919 synonymy], 1860, p. 296; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; Fischer, 1887, p. 1117; de Gregorio, 1890, p. 227, pl. 35, fig. 33 copy Conrad; Cossmann, 1893, p. 7; Dall, 1895a, p. 212; Dall, 1898b, pp. 881, 896; Harris, 1919, p. 178, pl. 54, figs. 13, 13a copy Conrad type; Stewart, 1930, p. 204; Brann and Kent, 1960, p. 753

Pteropsella papyria (Conrad), Vokes, 1956, p. 763 type species of *Pteropsella* Vokes

Kymatox papyrius (Conrad), Stenzel, Krause, and Twining, 1957, p. 130, pl. 16, figs. 1-3 lectotype and paralectotypes, p. 180 *Pteropsella* Vokes, 1956, p. 763

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (lectotype and paralectotypes Stenzel, Krause, and Twining) (2), No. 30533 ANSP, Moore, 1962, p. 83

Pteropsella praelapidosa (Stenzel and Krause)**Mactridae**

Pteropsis lapidosa Conrad, Deussen, 1924, p. 67; ? Trowbridge, 1932, pl. 41, figs. 10, 11

Astarte ? Renick and Stenzel, 1931, p. 104, in part, loc. 1 only

Kymatox praelapidosus Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 132, pl. 15, figs. 15, 16, text fig. 20 (p. 124); p. 180

Pteropsella Vokes, 1956, p. 763

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: Burlison Co., Stone City Bluff, Brazos R. (type)

Type.—Holotype, No. 20539 BEG

Pteropsis conradi Dana

See *Pteropsella lapidosa* (Conrad)

Pteropsis harrisi Van Winkle

See *Pteropsella lapidosa* (Conrad)

Pteropsis lapidosa (Conrad)

See *Pteropsella lapidosa* (Conrad)

Pteropsis lapidosa (Conrad) Deussen, 1924 not Conrad, 1846b

See *Pteropsella praelapidosa* (Stenzel and Krause)

Pteropsis papyria (Conrad)

See *Pteropsella papyria* (Conrad)

Rhabdopitaria astartoides (Gardner)**Veneridae**

Callocardia astartoides Gardner, 1923, p. 113, pl. 32, figs. 4-7; Trowbridge, 1932, pl. 41, figs. 2-5 copies Gardner

? *Pitaria astartoides* (Gardner) + *Pitaria* (*Rhabdopitaria*) *astartoides* (Gardner), Palmer, 1927/1929, pp. 30, 211, 212, pl. 44, figs. 15, 16

Not *Pitaria* (*Rhabdopitaria*) *astartoides* (Gardner), Price and Palmer, 1928, p. 27, pl. 6, figs. 1, 3-6; Brann and Kent, 1960, pp. 695, 696; see *R. pricei* Palmer in Price and Palmer, 1928, p. 28

Rhabdopitaria astartoides (Gardner), Stenzel, 1955, p. 145; Stenzel, Krause, and Twining, 1957, p. 155, pl. 18, figs. 7-10, text fig. 25, lectotype designated

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Localities.—TEXAS; Webb Co., about 7 mi. up the Rio Grande from Laredo at Knob Bluffs, $\frac{1}{4}$ mi. above pump of Santa Barbara farm (type); 500 yds. SW. of Espejo ranch, 8 mi. S. of Laredo; $1\frac{1}{2}$ mi. N. of and a trifle E. of 3d gate, 7 mi. SE. of Velenzuela ranch house; Zapata Co., 39.9 mi. N. of Rio Grande City, Starr Co., on river road to Zapata, just N. of Lopeño P. O.; Houston Co., Alabama Ferry, Trinity R.

See Stenzel, Krause, and Twining, 1957, pp. 157, 158 for further locality details

Types.—Lectotype and paralectotype, No. 352272 USNM

Rhabdopitaria discoidalis (Conrad)**Veneridae**

Cytherea discoidalis Conrad, 1833b, p. 37, not pl. 19, fig. 4 as in Conrad = *Corbula nasuta* Con. (Harris reprint, 1893, p. 59). Not Harris, 1893, pl. 20, fig. 2 = *C. trigoniata* Lea; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 16 in part

Cytherea discoidalis Conrad, Conrad, App. in Morton, 1834, p. 7 in part; not Bronn, 1848a, p. 398

Venus discoidalis (Conrad), d'Orbigny, 1850, p. 380 in part

Meretrix discoidalis (Conrad), Conrad, 1854, p. 30; Harris, 1919, p. 146, not pl. 46, fig. 8 copy Harris, 1893

Dione discoidalis (Conrad), Conrad, 1865a, p. 6 in part; Conrad, 1866a, p. 7

Cytherea trigoniata Lea, de Gregorio, 1890, p. 218 in part, *C. discoidalis* in synonymy

Omnivenus discoidalis (Conrad), Palmer, 1927/1929, p. 115 in part, pl. 24, figs. 10, 19 (type); Aldrich, 1931, p. 7, pl. 6, figs. 4, 4a

Rhabdopitaria discoidalis (Conrad), Stenzel, Krause, and Twining, 1957, pp. 154, 155

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Syntype, No. 4134 ANSP Moore, 1962, p. 54

Rhabdopitaria pricei Palmer**Veneridae**

Pitaria (*Rhabdopitaria*) *pricei* Palmer in Price and Palmer, 1928, p. 28, pl. 6, figs. 9, 10; Brann and Kent, 1960, p. 703

Pitaria (*Rhabdopitaria*) *astartoides* (Gardner), Price and Palmer, 1928, p. 27, pl. 6, figs. 1, 3-6; Brann and Kent, 1960, pp. 695, 696.

Not *P. astartoides* (Gardner), 1923. See Stenzel, Krause, and Twining, 1957, pp. 157, 158

Rhabdopitaria pricei (Palmer), Stenzel, Krause, and Twining, 1957, pp. 155, 157, 158

Range.—Middle Eocene. Upper Queen City fm. (type), lower Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, mouth of Gazley Cr., Smithville, Colorado R. (type)

Types.—Holotype, No. 344; paratype, No. 346 PRI

***Rhabdopitaria subcrassa* (Lea)**

Veneridae

Cytherea subcrassa Lea, 1833, p. 67, pl. 2, fig. 43; Conrad, 1835a (Harris reprint, 1893, p. 116, pl. 20, fig. 6); Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 43

Venus subcrassa (Lea), d'Orbigny, 1850, p. 380

Cytherea trigoniata subcrassa Lea, de Gregorio, 1890, p. 219, pl. 34, fig. 24 copy Lea

Meretrix subcrassa (Lea), Harris, 1919, p. 149, pl. 46, fig. 7 copy Lea; pl. 46, fig. 8 copy Conrad, 1835a (Harris reprint, 1893, pl. 20, fig. 6 under *C. subcrassa*); Palmer, 1927/1929, p. 115 [under *Omnivenus discoidalis* (Conrad)]

Rhabdopitaria subcrassa (Lea), Stenzel, Krause, and Twining, 1957, pp. 155, 157, pl. 18, figs. 11, 12

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5247 ANSP [*fide* Harris notebook, 1895c]

***Rhabdopitaria texangelina* Stenzel and Krause**

Veneridae

Rhabdopitaria texangelina Stenzel and Krause in Stenzel, Krause, and Twining, 1957, pp. 155, 158, pl. 18, figs. 5, 6

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: North-central *Angelina Co.*, highway borrow pit at the edge of the river flood plain about 300 ft. east of U.S. Highway 59 (Lufkin-Nacogdoches road) 0.83 mi. S. of Angelina R., 2.5 mi. N. of the school at Redland, (Bur. Ec. Geol. loc. No. 3-T-18)

Type.—Holotype, No. 20538 BEG

***Rhabdopitaria winnensis* (Harris)**

Veneridae

Meretrix trigoniata var. *winnensis* Harris, 1919, p. 147, pl. 46, figs. 9-13; Brann and Kent, 1960, p. 548

Pitaria (*Rhabdopitaria*) *winnensis* (Harris) Palmer, 1927/1929, p. 212, pl. 44, figs. 17, 19; Brann and Kent, 1960, p. 707

Rhabdopitaria winnensis (Harris), Stenzel, Krause, and Twining, 1957, p. 155

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: *Winn Par.*, possibly along the St. Maurice rd. leading past the "Marble Quarry", W. of Winnfield (type); *Jackson Par.*, gullies N. of old Quitman-Liberty Hill rd. on Mrs. J. M. Turner's place, W. of Madden Cr. by rd. 3.60 mi. W. of R.R. crossing at Quitman, sec. 15, T. 16 N., R. 2 W.

Types.—Syntypes, Nos. 1185-1188 PRI

***Rochefortia minuta* (Aldrich)**

See *Mysella minuta* (Aldrich)

Saccella ? atakta (Gardner)**Nuculanidae**

Leda atakta Gardner, 1927, p. 364, figs. 7, 8

? *Saccella* sp. cf. *S. atakta* (Gardner), Gardner, 1945, p. 48

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

Type.—Holotype, No. 369241 USNM

Saccella catasarca (Dall)**Nuculanidae**

Leda catasarca Dall, 1898b, p. 588, pl. 32, fig. 13; Schuchert, *et al.*, 1905, p. 345; Harris, 1919, p. 66, pl. 25, figs. 5, 5a; Brann and Kent, 1960, p. 474

Saccella catasarca (Dall), Harris and Palmer, 1946, p. 61

Range.—Middle Eocene, Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: *Clarke Co.*, Wautubbee (type)

Type.—Holotype, No. 145646 USNM

Saccella milamensis (Harris)

See *Nuculana milamensis* (Harris)

Saccella parva (Rogers and Rogers)**Nuculanidae**

Nucula parva Rogers and Rogers, 1837, p. 340; (reprint, 1884, p. 668), H. C. Lea, 1849, p. 102

Leda parva (Rogers), Conrad, 1854, p. 29

Nuculana parva (Rogers), Conrad, 1865a, p. 13; Conrad, 1866a, p. 3

Leda parva (Rogers), Clark, 1895, p. 5; Clark, 1896, p. 83, pl. 28, figs.

2a-d; Harris, 1897b, p. 53 in part, ? pl. 8, fig. 14 see *S. robusta*;

Dall, 1898b, p. 578 [not middle Eocene]; Clark and Martin, 1901, p.

197, pl. 56, figs. 5-7a; Van Winkle, 1921, p. 7 [not middle Eocene];

Brann and Kent, 1960, p. 478 see *S. robusta*

Saccella parva (Rogers), Harris and Palmer, 1946, p. 61

Nuculana (Saccella) parva (Rogers and Rogers), Shimer and Shrock, 1944, p. 377, pl. 146, fig. 28 copy Clark and Martin

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: [Co. ?] Pamunkey R., *Prince George Co.*, Coggin's Point, James R. (type); *King George Co.*, Woodstock; *Appomattox Co.*, Evergreen. MD.: *Charles Co.*, Popes Cr.; 2½ mi. above Popes Cr.

Type.—Unknown

Saccella quercollis (Harris)**Nuculanidae**

Leda quercollis Harris, 1896, p. 55, pl. 4, fig. 11; Dall, 1898b, p. 578;

Brann and Kent, 1960, p. 479

Saccella quercollis (Harris), Stewart, 1930, p. 57

Range.—Paleocene. Naheola fm. (type), upper Midway gr.

Localities.—ALA.: *Wilcox Co.*, 1 mi. W. of Oak Hill P. O. (type); Dales Branch near Oak Hill P.O.

Type.—Holotype, No. 37 PRI

Saccella robusta (Aldrich)**Nuculanidae**

Leda n. sp. Aldrich, 1886, p. 53 [listed only]

Leda robusta Aldrich, 1895b, p. 17, pl. 5, figs. 1, 1a; Dall, 1898b, p. 578

Leda parva (Rogers), Harris, 1897b, p. 53 in part ? pl. 8, fig. 14; Brann and Kent, 1960, p. 478

Nuculana (Saccella) robusta (Aldrich), Harris and Palmer, 1946, p. 61, pl. 14, figs. 15, 16

Range.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.; Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type); 1¼ mi. WSW. of Choctaw Corners; Monroe Co., Greggs Ldg., Alabama R.; 4 mi. above Hamilton Bluff, Alabama R.

Types.—Syntypes, Nos. 638960 (fig. 1), 638961 (fig. 1a) USNM

Saccella sp.

Nuculanidae

Nuculana sp. Harris and Palmer, 1946, p. 61, pl. 14, figs. 12-14, section *Saccella*; Brann and Kent, 1960, p. 610

Range.—Unknown. (Harris collection associated with Louisiana Jackson Eocene material.)

Locality.—Unknown. (Harris collection associated with Louisiana Jackson Eocene material.)

Type.—Figured specimen, No. 4241 PRI

Saccella sp.

Nuculanidae

Leda (Saccella) n. sp., Gardner, 1935, p. 120

Range.—Paleocene. Kincaid fm., lower Midway gr.

Locality.—TEXAS: Falls Co., USGS, Sta. 11932, ¼ mi. W. of Stranger School

Type.—Unfigured specimen not found USNM, 1962

Saxicavella alabamensis Aldrich

Saxicavidae

Saxicavella alabamensis Aldrich, 1921, p. 21, pl. 3, figs. 4, 5

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 46 GSATC

Cf. Saxolucina aquiana (Clark)

Lucinidae

Lucina aquiana Clark, 1895, p. 5; Clark, 1896, p. 78, pl. 20, figs. 1a, 1b; Clark and Martin, 1901, p. 174, pl. 37, figs. 1, 1a copy holotype; Schuchert, et al, 1905, p. 375

(?) *Lucina greggi* Harris, 1897a, p. 478 in part, pl. 22, fig. 5 (not fig. 6); Harris, 1897b, p. 70 in part, pl. 14, fig. 2a (not fig. 2)

Phacoides aquianus (Clark), Dall, 1903a, p. 1364

Range.—Paleocene. Aquia fm. (type)

Localities.—VA.: Stafford Co., Aquia Cr. (type). MD.: Prince Georges Co., Upper Marlboro

Types.—Syntypes, No. 148888 USNM

Saxolucina (Plastomiltha) claibornensis (Conrad)

Lucinidae

Cyclas claibornensis Conrad, 1865a, p. 8; Conrad, 1865c, p. 146

Lucina claibornensis (Conrad), not Aldrich, 1886, p. 57 (Greggs Ldg.); not Meyer, 1887a, p. 16 (Jackson); de Gregorio, 1890, p. 204; Coss-mann, 1893, p. 12; Harris, 1919, p. 121, pl. 39, figs. 8, 9, 9a; Brann and Kent, 1960, p. 505

Phacoides (Miltha) claibornensis (Conrad), Dall, 1903a, p. 1374 in part, pl. 50, fig. 18 not "Claiborne sands" as in text; Schuchert, *et al.*, 1905, p. 496

Miltha (Plastomiltha) claibornensis (Conrad), Stewart, 1930, p. 191

Saxolucina (Plastomiltha) claibornensis (Conrad), Chavan, 1938, p. 74, fig. 13

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark. GA.: *Clay Co.*, Ft. Gaines

Types.—Syntypes (2), No. 18855 ANSP Moore, 1962, p. 47

***Saxolucina claytonia* (Harris)**

Lucinidae

Lucina claytonia Harris, 1896, p. 69, pl. 6, figs. 10, 10a; Brann and Kent, 1960, p. 505

Phacoides (Miltha) claytonia (Harris), Dall, 1903a, p. 1375

Saxolucina Claytonia (Harris), Chavan, 1938, pp. 70, 75

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Locality.—ALA.; *Barbour Co.*, R.R. cut, 1½ mi. NE. of Clayton (type)

Types.—Syntypes, Nos. 72, 74 PRI

***Saxolucina (Plastomiltha) fortidentalis* (Harris)**

Lucinidae

Lucina fortidentalis Harris, 1896, p. 69, pl. 6, figs. 11, 11a; Brann and Kent, 1960 p. 506

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Localities.—ALA.: *Wilcox Co.*, 1 mi. N. of Midway. GA.: *Clay Co.*, "not far" N. of mouth of Sandy Cr., Chattahoochee R. (type)

Types.—Syntypes, Nos. 75, 76 PRI

***Saxolucina (Plastomiltha) gaufia* Harris**

Lucinidae

Lucina (Plastomiltha) gaufia Harris in Harris and Palmer, 1946, p. 91, pl. 20, figs. 9-13; Brann and Kent, 1960, pp. 506, 507

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—ALA.: *Washington Co.*, Gopher Hill (Bakers Bluff) above St. Stephens Bluff, Tombigbee R. (type). LA.: *Grant Par.*, Montgomery, Red R. MISS.: *Clarke Co.*, Garland Cr.

Types.—Holotype, No. 4338; paratypes, Nos. 4339, 4340 PRI

Cf. *Saxolucina greggi* (Harris)

Lucinidae

Lucina greggi Harris, 1897a, p. 478 in part, pl. 22, fig. 6 (not fig. 5 = *S. aquiana*); Harris, 1897b, p. 70 in part, pl. 14, fig. 2 (not fig. 2a = *S. aquiana*)

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

Type.—Holotype, ANSP

Scintilla alabamiensis Cossmann**Galeommatidae**

Scintilla alabamiensis Cossmann, 1893, p. 12, pl. 1, figs. 15, 16; Harris, 1919, p. 105, pl. 37, figs. 1, 2 copy Cossmann

Solecardia (Spaniorinus) alabamiensis (Cossmann), Dall, 1899, p. 882

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 11644 Lab. Géol., Sorbonne, Paris

Scintilla clarkeana Aldrich**Galeommatidae**

Scintilla clarkeana Aldrich, 1897a, p. 16, pl. 5, fig. 8

"*Scintilla*" *clarkeana* Aldrich, Harris, 1897b, p. 58, pl. 11, fig. 9 copy Aldrich

Solecardia (Spaniorinus) clarkeana (Aldrich), Dall, 1899, p. 882

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Choctaw Corner (type)

Type.—Holotype, No. 639001, USNM

Semele australina Harris**Semelidae**

Semele australina Harris, 1919, p. 172, pl. 52, figs. 9, 9a, 10 "var."; Brann and Kent, 1960, p. 790

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Localities.—S.C.: Orangeburg Co., Orangeburg District (type).

TEXAS: Zapata Co., 15 mi. below Carrizo Cr. (variation Harris)

Type.—Holotype, No. 1238 PRI

Semele langdoniana Aldrich**Semelidae**

Semele langdoniana Aldrich, 1921, p. 18, pl. 2, figs. 19, 20, holotype, left valve

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 44 GSATC

Semele linosa (Conrad)**Semelidae**

Amphidesma linosa Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 13); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846c, p. 397, pl. 4, fig. 2; H. C. Lea, 1849, p. 95 *linosum*; d'Orbigny, 1850, p. 377; Harris, 1895b, p. 23

Syndosmya linosa (Conrad), Conrad, 1854, p. 29

Semele linosa (Conrad), Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 276, pl. 35, fig. 29 copy Conrad; Dall, 1900, p. 986; Harris, 1919, p. 170, pl. 52, figs. 1-3 not Jackson Eocene; Brann and Kent, 1960, p. 790

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes (2), No. 20253 ANSP Moore, 1962, p.

Semele linosa Conrad "var."**Semelidae**

Semele linosa Conrad var. Harris, 1919, p. 171, pl. 52, figs. 5, 5a

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Locality.—S.C.: Calhoun Co., Keitt's Ravine [Kitts], 4½ mi. NW. of Creston

Type.—Figured specimen, USNM missing prior to 1962

Semele linosa claibornensis Harris**Semelidae**

Semele profunda ? Dall, 1900, p. 986

Semele linosa var. *claibornensis* Harris, 1919, p. 171, pl. 52, figs. 4, 4a, fig. 6, p. 171 *S. linosa* var. locality and specimen unknown

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 129548 USNM, missing 1962

Semele monroensis Aldrich**Semelidae**

Semele monroensis Aldrich, 1921, p. 19, pl. 2, figs. 21, 22

Range.—Lower Eocene. Bells Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Bells Ldg., Alabama R. (type)

Type.—Holotype, No. 45 GSATC

Semele profunda (Conrad)**Semelidae**

Amphidesma profunda Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a (Harris reprint 1893, p. 115, pl. 19, fig. 14); d'Orbigny, 1850, p. 377; Harris, 1895b, p. 36

Semele profunda (Conrad), Harris, 1919, p. 171, pl. 52, figs. 7, 8 specimen lost prior to 1937; Brann and Kent, 1960, p. 791; not Dall, 1900, p. 986 (= *Semele linosa claibornensis* Harris)

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Missing ANSP Moore, 1962, p. 89

Semele profunda Dall, 1900 not Conrad, 1833c

See *Semele linosa claibornensis* Harris

Siliqua simondsi Harris**Solenidae**

Siliqua simondsi Harris, 1895a, p. 51, pl. 3, fig. 2; Dall, 1900, p. 956;

Harris, 1919, p. 196, pl. 59, fig. 4 copy Harris

Range.—? Upper Eocene. Jackson gr. (Harris, 1919)

Locality.—TEXAS: Brazos Co., Dr. Williams' Quarry, Stephenson's Headright (type)

Type.—Holotype, No. 35578 BEG

Siliqua ? sp.**Solenidae**

Siliqua ? sp. Gardner, 1935, p. 188

Range.—Paleocene. Mexia mem., Wills Point fm., upper Midway gr.

Locality.—TEXAS: Williamson Co., Little Dry Brushy Cr. on the Taylor-Beaukiss rd., 6 mi. S. of Thrall (USGS Sta. 10796)

Type.—Unfigured specimen not found USNM, 1962

Sinodia (Sinodia) eocaenica Stenzel and Krause**Veneridae**

Meretrix trigoniata Lea var. *bastropensis* Harris, Renick and Stenzel, 1931, p. 104 in part. loc. 1 only

Sinodia (Sinodia) eocaenica Stenzel and Krause, in Stenzel, Krause and Twining, 1957, p. 160, pl. 13, figs. 10, 11, text fig. 26

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Type.—Holotype, No. 20671 BEG

Solecardia (Spanorinus) alabamensis (Cossmann)

See *Scintilla alabamensis* Cossmann

Solecardia (Spanorinus) clarkeana (Aldrich)

See *Scintilla clarkeana* Aldrich

Solecortus Blainvillii Lea

See *Gari (Gobraeus) blainvillii* (Lea)

See also *Gari eborea* (Conrad)

Solemya alabamensis Harris**Solemyidae**

Solemya alabamensis Harris, 1897b, p. 73, pl. 14, fig. 12; Harris, 1919, p. 76 in part, not pl. 26, fig. 16; Vokes, 1955, p. 540; Brann and Kent, 1960, p. 804 in part, not No. 630=*Solemya* sp.; Quenstedt, 1962, p. 39 in part

Range.—Lower Eocene. Bashi mem., (type), Hatchitigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, 4 mi. above Hamilton Bluff, Alabama R. (type)

Type.—Holotype, lost prior to 1937 PRI

Solemya petricoloides Clark

See cf. *Lithophaga marylandica* Clark and Martin; not *Byssomya petricoloides* Lea, 1833

Solemya sp.**Solemyidae**

Solemya alabamensis Harris, 1919, p. 76 in part, pl. 26, fig. 16; Brann and Kent, 1960, p. 804 in part, No. 630; Quenstedt, 1962, p. 39 in part

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Localities.—S.C.: *Orangeburg Co.*, 5 mi. N. of Orangeburg (Harris, 1919, p. 76); GA.: *Clay Co.*, Fort Gaines

Type.—Figured specimen, No. 630 PRI

Solen lisbonensis Aldrich

See *Eosolen lisbonensis* (Aldrich)

Solen (Plectosolen) lisbonensis abruptus Dall

See cf. *Eosolen lisbonensis abruptus* (Dall)

Solen pendletonensis Barry**Solenidae**

Solen pendletonensis Barry, 1942+, p. 72, pl. 9, fig. 10

Range.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

Localities.—TEXAS: *Sabine Co.*, $\frac{1}{4}$ mi. upstream from bridge over Sabine R. on La. Highway 6 (type). LA: *Natchitoches Par.*, hillside in extreme NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ NW. $\frac{1}{4}$ sec. 9, T. 8 N., R. 9 W.; rd. cut along local rd. in NE. $\frac{1}{4}$ SW. $\frac{1}{4}$ NE. $\frac{1}{4}$ sec. 19, T. 9 N., R. 8 W.

Type.—Holotype, No. 5223 LSU Pal. Mus.

Solen sp.

Solenidae

Solen lisbonensis ? Aldrich, Clark and Martin, 1901, p. 165 in part, pl. 33, fig. 1

Range.—Lower Eocene, Nanjemoy fm.

Localities.—MD.: *Charles Co.*, $\frac{1}{2}$ mi. below Chapel Point. VA.:

King George Co., Woodstock

Type.—Figured specimen, JHU, 1962

Solen sp. Harris, 1897b

See *Eosolen lisbonensis* (Aldrich)

Solena (Eosolen) lisbonensis (Aldrich)

See *Eosolen lisbonensis* (Aldrich)

Solena (Eosolen) lisbonensis abruptus Dall

See *Eosolen lisbonensis abruptus* (Dall)

Sphaerella anteproducta Harris

See *Timothygnus anteproductus* (Harris)

Sphaerella bulla Conrad

See *Timothygnus bulla* (Conrad)

Sphaerella inflata (Lea)

See *Diplodonta (Diplodonta) inflata* (Lea)

Sphaerella levis (Conrad)

See *Diplodonta inflata* (Lea)

"*Sphaerella*" sp. Harris, 1897b, p. 65

See *Diplodonta hopkinsensis* Clark

Spisula albirupina (Harris)

Mactridae

Mactra albirupina Harris, 1894b, p. 155, pl. 6, fig. 2; Schuchert, *et al.*, 1905, p. 383

Spisula albirupina (Harris), Dall, 1898b, p. 896

Mactra (Spisula) albirupina Harris in Harris and Palmer, 1946, p. 109, pl. 23, figs. 11, 12; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 521

Range.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

Locality.—ARK.: *Jefferson Co.*, White Bluff, S. bank Arkansas R. (type)

Types.—Syntypes, No. 153773 USNM

Spisula decisa (Conrad)

Pl. 3, fig. 2 Mactridae

Mactra decisa Conrad, 1833c, p. 42; (Harris reprint, 1893, p. 68); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 216, pl. 1, fig. 3 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Conrad, 1865a, p. 3; Conrad, 1866a, p. 8; Harris, 1895b, p. 14

Macra decisa Conrad sp. dub. de Gregorio, 1890, p. 228 in part, pl. 36, fig. 11 copy Conrad
Spisula decisa (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 176, pl. 54, fig. 1; Brann and Kent, 1960, p. 814

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype (hinge fragment), No. 30583 ANSP Moore, 1962, p. 52

***Spisula decisa palmaris* Harris**

Macridae

Spisula decisa palmaris Harris, 1919, p. 176, pl. 54, figs. 2-6; Brann and Kent, 1960, p. 814

Range.—Middle Eocene. McBean fm., upper Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type). S.C.: Orangeburg Co., 5 mi. N. of Orangeburg;

Calhoun Co., Keitt's [Kitts] Ravine, 4½ mi. NW. of Creston

Types.—Syntypes, Nos. 1252, 1253 PRI

***Spisula jacksonensis* Cooke**

Macridae

Spisula jacksonensis Cooke, 1926b, p. 137, figs. 14a-c

Macra (Spisula) jacksonensis Cooke, Harris and Palmer, 1946, p. 107, pl. 23, figs. 7-10; Brann and Kent, 1960, p. 522

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson, Moodys Branch (type)

Type.—Holotype, No. 353950 USNM

***Spisula mississippiensis* (Conrad) subsp.**

Macridae

Macra mississippiensis Conrad, var., Harris, 1897a, p. 471, pl. 18, fig. 6

Not *M. mississippiensis* Conrad, 1848a, p. 290; nor Conrad, 1848b, p. 121, pl. 12, fig. 14 Vicksburg Oligocene

Not *Spisula mississippiensis* (Conrad), Dall, 1898b, p. 896 Vicksburg Oligocene

Spisula mississippiensis (Conrad), Harris and Palmer, 1946, p. 106, pl. 23, fig. 2 same as 1897a

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson

Type.—Figured specimen, ANSP

***Spisula parilis* (Conrad)**

Macridae

Macra parilis Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 8); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 217, pl. 1, fig. 6 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Conrad, 1865a, p. 3 as *Macra* ?; Conrad, 1866a, p. 8; Cossmann, 1893, p. 8; Harris, 1895b, p. 32

Macra pygmaea Lea, 1833, p. 44, pl. 1, fig. 11; Conrad, App. in Morton, 1834, p. 8=*M. parilis* Conrad; H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375 under *M. parilis* Conrad; Tuomey, 1858, p. 266; Harris, 1895b, p. 38

Mactra (*Cyrena* ?) *parilis* Conrad, de Gregorio, 1890, p. 227, pl. 36, figs. 1 copy Lea, 22 copy Conrad

Mactra (*Cyrena* ?) *parilis* Mut. *subcuneata* de Gregorio, 1890, p. 228, pl. 36, figs. 6-9; as Mut. *subtruncata* de Gregorio, 1890, p. 227, figs. 6-9; Mut. *subaequilatera*, pp. 227, 228, pl. 36, figs. 2-5; Harris, 1919, p. 201

Spisula parilis (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 174, pl. 53, figs. 2, 3, 3a; Brann and Kent, 1960, p. 814

Mactra (*Spisula*) *parilis* Conrad, Harris and Palmer, 1946, p. 106, pl. 23, figs. 3-6; Brann and Kent, 1960, p. 522

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, No. 30720 ANSP Moore, 1962, p. 83

***Spisula parilis bistriata* (Harris)**

Mactridae

Mactra praetenuis Conrad, Aldrich, 1886, p. 50 not Conrad, 1833c, p. 42
Mactra praetenuis var. *bistriata* Harris, 1897b, p. 66 in part, pl. 13, fig. 10; Brann and Kent, 1960, p. 523

Mactra bistriata Harris, Harris, 1899b, p. 303, pl. 53, fig. 4

Spisula parilis var. *bistriata* (Harris), Harris, 1919, p. 174, pl. 53, fig. 4; Brann and Kent, 1960, p. 814

Spisula parilis bistriata (Harris), Barry, 1942+, p. 72, pl. 5, fig. 2

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm. upper Wilcox gr. Sabinetown fm., upper Wilcox [Sabine] gr.

Localities.—TEXAS: Sabine Co., Sabinetown Bluff, Sabine R.

ALA.: Monroe Co., 4 mi. above Hamilton Bluff, Alabama R.; Dale Co., Ozark (type)

Type.—Holotype, No. 178 PRI

***Spisula praetenuis* (Conrad)**

Mactridae

Mactra praetenuis Conrad, 1833c, p. 42 (Harris reprint, 1893, p. 68, pl. 19, fig. 9); Conrad, App. in Morton, 1834, p. 8; Conrad, 1846b, p. 217, pl. 1, fig. 4 (not pl. 2 as in text); H. C. Lea, 1849, p. 101; d'Orbigny, 1850, p. 375; Harris, 1895b, p. 36; Dall, 1898b, p. 896

Mactrella praetenuis (Conrad), Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 228, pl. 36, fig. 10 copy Conrad; Cossmann, 1893, p. 8

Spisula praetenuis (Conrad), Dall, 1898b, p. 896; Harris, 1919, p. 175 in part, pl. 53, figs. 5 copy Conrad, figs. 6-8; Brann and Kent, 1960, p. 815

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, (3) No. 20391 ANSP Moore, 1962 p. 89

***Spisula cf. praetenuis* (Conrad)**

Mactridae

Spisula praetenuis (Conrad), Harris, 1919, p. 176 Montgomery, La.

Mactra (*Spisula*) *praetenuis* (Conrad), Harris and Palmer, 1946, p. 106 in part, pl. 23, fig. 1; Harris, 1951, p. 26 in part, pl. 13, figs. 10, 11 ?; Brann and Kent, 1960, p. 523

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.; Ocala gr.

Localities.—LA.: *Grant Par.*, Montgomery Ldg., Red R. ARK.: *St. Francis Co.*, Crow Cr.; *Jefferson Co.*, White Bluff, S. bank Arkansas R. FLA.: *Marion Co.*, Ocala Lime Rock Corp., quarry east side Highway 314, east of Kendrick. GA.: *Houston Co.*, 4 mi. from Perry; *Clay Co.*, Fort Gaines

Types.—Figured specimens, No. 4382 PRI, Montgomery, La.; Nos. 24527, 24528 PRI [omitted in Brann and Kent, 1960], Harris, 1951

***Spisula praetenuis australina* Harris**

Mactridae

Spisula praetenuis var. *australina* Harris, 1919, p. 175, pl. 53, figs. 9-12; Brann and Kent, 1960, p. 815

Range.—Middle Eocene. McBean fm (type), upper Claiborne gr.

Locality.—S.C.: *Orangeburg Co.*, Orangeburg District (type)

Types.—Syntypes, Nos. 1246-1250 PRI

Spondylus amussiopse de Gregorio

See *Plicatula filamentosa* Conrad

***Spondylus dumosus* (Morton)**

Spondylidae

Plagiostoma dumosum Morton, 1834, p. 59, pl. 16, fig. 8, text fig. p. 60; Conrad, App. in Morton, 1834, p. 6; Morton, 1842, p. 216 not Morton, 1840, p. 14 as in De Gregorio

Lima dumosa (Morton), d'Orbigny, 1850, p. 392

Spondylus dumosus (Morton), Conrad, 1865a, p. 14; Conrad, 1866a, p. 23; de Gregorio, 1890, p. 179 in subgenus *Plagiostoma*; Cossmann, 1893, p. 18; Dall, 1898b, p. 758; Hopkins, 1917, p. 299, pl. 27, fig. 5; Harris and Palmer, 1946, p. 25, pl. 6, figs. 2, 2a; Brann and Kent, 1960, p. 816

Spondylus (*Plagiostoma*) *dumosus* Morton, de Gregorio, 1890, p. 179
Lima (*Plagiostoma*) *dumosum* Morton, Teppner, 1914, p. 31

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. Lower Oligocene, Red Bluff beds (type)

Localities.—ALA.: *Clarke Co.*, St. Stephens Bluff, Tombigbee R. (type); *Choctaw Co.*, Melvin; *Cocoa P.O. MISS.*: *Wayne Co.*, Red Bluff [Hiwanee], Chickasawhay R.; *Clarke Co.*, Carsons Cr. near Shubuta

Type.—Holotype, lost ANSP, 1962

Spondylus dumosus (Morton), Aldrich, 1885c; 1886 as var.

See *Spondylus* sp.

***Spondylus hollisteri* Harris**

Spondylidae

Spondylus hollisteri Harris, 1951, p. 8, pl. 2, figs. 10, 11; pl. 3, figs. 1-4; Brann and Kent, 1960, p. 817

Range.—Upper Eocene. "Ocala ls.", Ocala gr. (type)

Locality.—FLA.: *Marion Co.*, Ocala Lime Rock Corp. E. side of Highway 314, E. of Kendrick (type)

Types.—Holotype, No. 24445; paratypes, Nos. 24443, 24444, 24446 PRI

***Spondylus lamellacea* Kellum**

Spondylidae

Spondylus lamellacea Kellum, 1926, p. 21, pl. 2, figs. 7-9

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Localities.—N.C.; *Pender Co.*, Northeast Cape Fear River, 3½ mi. above Castle Hayne Bridge (type); old Rocky Point; *New Hanover Co.*, Wilmington

Types.—Holotype, No. 353282; paratypes, Nos. 353297, 353251 USNM

Spondylus sp.

Spondylidae

Spondylus sp. Harris, 1919, p. 29

Range.—Middle Eocene, Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: *Winn Par.*, Atlanta rd., 6 mi. W. of Winnfield

Type.—Specimen lost.

Spondylus sp.

Spondylidae

Not *Plagiostoma dumosum* Morton, Conrad, 1835a, p. 34 as in Harris, 1897b, p. 42; cf. Conrad, 1835b, p. 336

Spondylus dumosus (Morton), Aldrich, 1885c, p. 305. Not *S. dumosus* Morton, 1834, p. 39

Spondylus dumosus (Morton) var., Aldrich, 1886, p. 50

Spondylus sp. Harris, 1897b, p. 42, pl. 6, fig. 11; Brann and Kent, 1960, p. 817

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R.; *Dale Co.*, Ozark, R.R. cut just beneath the "Buhrstone"

Type.—Figured specimen, Harris, No. 221 PRI

Sportella alabamensis (Aldrich)

Sportellidae

Lepton ? alabamensis Aldrich, 1897a, p. 16, pl. 5, fig. 9

Sportella alabamensis (Aldrich), Dall, 1899, p. 882; Dall, 1900, pp. 1126, 1140; Harris, 1919, p. 106, pl. 37, fig. 4 copy Aldrich

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Washington Co.*, Bakers Bluff, ½ mi. above St. Stephens, Tombigbee R. (type)

Type.—Holotype, No. 639003 USNM

Sportella ? divaricata (Johnson)

Sportellidae

Linearia ? divaricata Johnson, 1904, p. 143, text fig.

Because the hinge is not available, the range of the genus *Linearia* Conrad, 1860 is Cretaceous, and the figure of this species does not appear too close to *Linearia*, we are questionably inserting the species in *Sportella* Deshayes, 1858, p. 593

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Cherokee Co.*, Berryman's place, 2 mi. NE. of Alto (type) [see Stenzel, Krause, and Twining, 1957, p. 147]

Type.—Holotype, Lea Coll. ANSP (Acc. No. 9706)

Sportella gregorioi Cossmann

Sportellidae

Sportella Gregorioi Cossmann, 1893, p. 11, pl. 1, figs. 11, 12; Aldrich, 1897a, p. 7, pl. 5, fig. 4; Dall, 1899, p. 882; Dall, 1900, p. 1126; Harris, 1919, p. 105, pl. 37, figs. 3, 3a copies Cossmann; fig. 3b copy Aldrich

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.; *Monroe Co.*, Claiborne Bluff, Alabama R., (type); *Clarke Co.*, "sand bed at W. Pughs" (Aldrich)

Type.—Holotype, No. 11641 Lab. Géol., Sorbonne, Paris

***Sportella oblonga* (Aldrich)**

Sportellidae

Fabella oblonga Aldrich, 1897a, p. 16, pl. 5, figs. 2a 2a

"*Fabella*" *oblonga* Aldrich, Harris, 1897b, p. 58, pl. 11, figs. 7, 8 copy Aldrich

Sportella oblonga (Aldrich), Dall, 1899, p. 882; Dall, 1900, p. 1126

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Choctaw Corner (type) [not Woods Bluff as in Dall]

Type.—Specimen labeled type is in USNM, but it is not the figured specimen *vide* D. Wilson, 1962

Stalagmium margaritaceum Conrad

See *Crenella margaritacea* (Conrad)

Cf. *Striarca harrisi* (Sheldon)

Arcidae

Arca inornata Meyer, 1886b, p. 79, pl. 1, fig. 24; de Gregorio, 1890, p. 197, pl. 24, fig. 29 copy Meyer; Not Meek and Hayden, 1858, p. 51 (= ? Silurian, Nebraska)

Arca (*Fossularca* ?) *inornata* Meyer, Cossmann, 1893, p. 17; Dall, 1898b, p. 658

Arca harrisi Sheldon, 1917, p. 21, pl. 4, fig. 15 copy Meyer, new name for *A. inornata* Meyer; Harris, 1919, p. 56, pl. 22, fig. 21 copy Meyer

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638849 USNM

***Striarca stearnsii* (Gardner)**

Arcidae

Breviarca stearnsii Gardner, 1935, p. 131, pl. 6, figs. 9, 10

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Locality.—TEXAS; *Travis Co.*, USGS Sta. 5282, clay from bluff at Webberville (type)

Type.—Holotype, No. 373167 USNM

Syndesmya [sic] *tellinula* (Conrad)

See *Abra* (*Abra*) *nitens* (Lea)

Syndesmya linosa (Conrad)

See *Semele linosa* (Conrad)

Taras hopkinsensis (Clark)

See *Diplodonta hopkinsensis* Clark

Tellina albaria Conrad, 1865b, not Conrad, 1849

See *Tellina spillmani* Dall

Tellina aldrichi Dall**Tellinidae**

Tellina (*Moerella* ?) *aldrichi* Dall, 1900, p. 1017 in part, pl. 46, fig. 9; Schuchert, *et al.*, 1905, p. 642

Tellina aldrichi Dall, Harris, 1919, p. 160, pl. 49, fig. 12 copy Dall

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. (type); [? Greggs Ldg., Alabama R.; Bells Ldg., Alabama R., Dall]

Type.—Holotype, No. 90948 USNM

Tellina alta ConradPl. 3, fig. 6 **Tellinidae**

Tellina alta Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; not *T. alta* Conrad, 1837, p. 258; Conrad, 1846c, p. 399, pl. 4, fig. 10; H. C. Lea, 1849, p. 106; Harris, 1895b, p. 4; Harris, 1919, p. 167, pl. 50, fig. 22 copy Conrad
Arcopagia alta (Conrad), d'Orbigny, 1850, p. 376; Cossmann, 1893, p. 9
Tellina (*Arcopagia*) *alta* Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; de Gregorio, 1890, p. 225, pl. 35, fig. 30 copy Conrad; Dall, 1900, p. 1015

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Types.—Syntypes (3), No. 30527 ANSP Moore, 1962, p. 36

Tellina bellsiana Aldrich**Tellinidae**

Tellina bellsiana Aldrich, 1921, p. 17, pl. 2, figs. 15, 16; Barry, 1942+, p. 70, pl. 9, fig. 12

Range.—Lower Eocene. Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine gr.]; Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Pendleton Ferry fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R.; Greggs Ldg., Alabama R. (type), *vide* list types Ala. Mus. LA.: For locations in *Sabine Par.* see Barry, 1942+, p. 71

Type.—Holotype, No. 57 GSATC

Tellina cherokeensis Harris**Tellinidae**

Tellina cherokeensis Harris, 1919, p. 165, pl. 50, figs. 19, 20; Brann and Kent, 1960, p. 839

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Cherokee Co.*, W. H. Berryman's place, 11 mi. from Rusk and 2.5 from Linwood (type) (Stenzel, Krause, and Twining, 1957, p. 147)

Types.—Syntypes, Nos. 1226, 1227 PRI

Tellina cossmanni Dall**Tellinidae**

Tellina nitens de Gregorio, 1890, p. 223, pl. 35, figs. 13-16; Cossmann, 1893, p. 8 under *Tellina nitens* Lea, 1833; Dall, 1900, p. 1015 not yg. of *Diplodonta unguolina* as stated

Tellina cossmanni Dall, 1900, p. 997; Harris, 1919, p. 164, pl. 50, figs. 13-16 copies De Gregorio

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost.

***Tellina cynoglossa* Dall**

Tellinidae

Tellina cynoglossa Dall, 1900, p. 1017, pl. 46, fig. 27; Schuchert, *et al.*, 1905, p. 643; Aldrich, 1921, p. 17

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 154537 USNM

***Tellina cynoglossula* Harris**

Tellinidae

Tellina cynoglossula Harris, 1919, p. 161, pl. 49, figs. 15, 16

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Washington Co., Gopher Hill, Tombigbee R. (type)

Types.—Syntypes, No. 559280 USNM

***Tellina eburneopsis* Conrad**

Pl. 2, fig. 2 Tellinidae

Tellina (Angulus) eburneopsis Conrad, 1865b, p. 138, pl. 10, fig. 17

Tellina eburneopsis ? Conrad, Meyer, 1887b, p. 54, pl. 3, figs. 15, 15a

Tellina (Arcopagia) eburneopsis Conrad, Dall, 1900, p. 1015

Tellina eburneopsis Conrad, Conrad, 1866a, p. 24; Harris, 1897a, p. 471, pl. 18, fig. 6; Harris and Palmer, 1946, p. 100, pl. 21, figs. 19, 20; Brann and Kent, 1960, p. 840

Range.—Upper Eocene. Lower Jackson gr. (type)

Localities.—MISS.: Clark Co., "Enterprise" [error] Garland Cr. (type), see Aldrich, 1885c, p. 307; Hinds Co., Jackson. ARK.:

Cleveland Co. LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

Type.—Holotype, No. 13218 ANSP Moore, 1962, p. 57

***Tellina (Angulus) entaenia* Dall**

Tellinidae

Tellina (Angulus) entaenia Dall, 1900, p. 1016, p. 1216 Index *eutaenia* [sic], pl. 46, fig. 2 *eutaenia* [sic]; Schuchert, *et al.*, 1905, p. 644 as

eutaenia; Harris, 1919, p. 162, pl. 50, fig. 2 copy Dall

Although the spelling of the specific name was spelled *eutaenia* in three instances we are retaining the spelling as in the text.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 137391 USNM

***Tellina (Angulus) entaenia equator* Harris**

Tellinidae

Tellina (Angulus) entaenia equator Harris, 1919, p. 162, pl. 50, fig. 1; Brann and Kent, 1960, p. 840

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 1223 PRI

Tellina estellensis Aldrich**Tellinidae**

Tellina [sp.] Harris, 1896, p. 68, pl. 6, fig. 8; Brann and Kent, 1960, p. 843

Tellina estellensis Aldrich, 1921, p. 17, pl. 2, figs. 13, 14

Tellina estellensis Aldrich, Barry, 1942+, p. 70, pl. 9, fig. 3; pl. 10, fig. 1

Range.—Paleocene. Sucarnoochee cl. (type) [Porters Creek fm.], upper Midway gr.; "Logansport fm." (name preoccupied), middle Midway gr. (Barry)

Localities.—TENN.: Hardeman Co., Hannah's, 1¾ mi. N. of Crainesville. ALA.: Wilcox Co., near Estelle (type). LA.: For localities in Sabine Par., Natchitoches Par. and De Soto Par. see Barry

Type.—Holotype, No. 64 GSATC

Tellina greggi Harris**Tellinidae**

Tellina lignitica Harris, 1897a, p. 477 name used in text

Tellina greggi Harris, 1897a, pl. 22, figs. 3, 3a. Name used in expl. pl. for same as in text. The question would be which name has priority, the one of the description or the one on the plate. In this case Harris used *greggi* the second time as did Dall so that it is less confusing to retain the name *greggi* for the species.

Tellina greggi Harris, Harris, 1897b, p. 72 in part not *T. virginiana*, pl. 14, figs. 9a-d; Brann and Kent, 1960, p. 840

Tellina (*Moerella*) *Greggi* Harris (not *T. virginiana*, Clark, 1895); Dall, 1900, p. 1015

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.; Wilcox Co., Yellow Bluff, Alabama R.; Monroe Co., Greggs Ldg., Alabama R. (type)

Types.—Syntypes, ANSP

Tellina greggi Harris, Harris, 1897b, p. 72 in part
See *Tellina* (*Angulus*) *virginiana* Clark

Tellina leana Dall**Tellinidae**

Egeria ovalis Lea, 1833, p. 54, pl. 1, fig. 25 (not fig. 24 as in text and on expl. pl.); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 5; Conrad, 1866a, p. 7; Cossmann, 1893, p. 9 footnote; Harris, 1895b, p. 31. Not "*Tellina ovalis* Sowerby, 1825" as in Dall, 1900. G. B. Sowerby I, 1825a, p. 3, App. = *Tellinides ovalis*. Not *Tellina ovalis* S. Woodward, 1833, p. 43 preoccupies *Egeria ovalis* Lea, 1833, Dec. = *Tellina*

Tellina ovalis (Lea), Conrad, App. in Morton, 1834, p. 7; d'Orbigny, 1850, p. 377; Cossmann, 1893, p. 8

Tellina (*Peronaeoderma*) *ovalis* (Lea), Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224 in part, not pl. 35, fig. 34 copy *Tellina plana* (Lea)

Donax plana (Lea), de Gregorio, 1890, p. 221 in part, pl. 35, fig. 3 copy *Tellina ovalis* (Lea); not figs. 1, 2 = *Tellina plana* (Lea)

Tellina (*Moerella*) *Leana* Dall, 1900, p. 1015 new name for *Tellina ovalis* (Lea)

Tellina leana Dall, Harris, 1919, p. 163, pl. 50, figs. 4-6; Brann and Kent, 1960, p. 840

- Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.
Localities.—ALA.: Monroe Co., Claiborne Bluff, base of bluff; Gosport sd. bed (type), Alabama R.
Type.—Holotype, No. 5135 Lea Coll. ANSP (Harris Cat. 1895c)

Tellina leana praegravis Harris**Tellinidae**

Tellina leana praegravis Harris, 1919, p. 164, pl. 50, figs. 10-12

- Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.
Locality.—S.C.: Calhoun Co., Keitts Ravine [Kitt's], $4\frac{1}{2}$ mi. NW. of Creston (type)
Types.—Missing, USNM prior to 1962

Tellina leana sabotica Harris**Tellinidae**

Tellina leana sabotica Harris, 1919, p. 164, pl. 50, figs. 8, 9

- Range*.—Middle Eocene. McBean fm. (type), upper Claiborne gr.
Locality.—S.C.: Calhoun Co., Keitts Ravine [Kitt's], $4\frac{1}{2}$ mi. NW. of Creston (type)
Types.—Missing, USNM prior to 1962

Tellina leana yeguana Harris**Tellinidae**

Tellina leana yeguana Harris, 1919, p. 164, pl. 50, fig. 7

- Range*.—Middle Eocene. Yegua fm. (type), uppermost Claiborne gr. *vide* Patterson, 1942
Locality.—TEXAS: Lee Co., W. Yegua Cr. (type)
Type.—Lost, *vide* Rodda, 1963

Tellina lignitica Harris

See *Tellina greggi* Harris

Tellina linifera Conrad**Tellinidae**

Tellina (Tellinella) linifera Conrad, 1865b, p. 138, pl. 10, figs. 16, 18; Harris and Palmer, 1946, p. 99, pl. 21, figs. 15-18; Brann and Kent, 1960, p. 841
Tellina linifera Conrad, Conrad, 1866a, p. 24; Harris, 1894b, p. 154; Dall, 1900, p. 1015

- Range*.—Upper Eocene. Lower Jackson gr. (type)
Localities.—MISS.: Clarke Co., "Enterprise" [error] Garland Cr. (type); see Aldrich, 1885c, p. 307; $1\frac{1}{2}$ mi. above Shubuta on Chickasawhay R.; Hinds Co., Jackson, Town Cr. LA.: Grant Par., Montgomery Ldg., Red R. ARK.: Cleveland Co., Vince Ferry, Saline R. ALA.: Clarke Co., Little Stave Cr.
Types.—Syntypes (2), Nos. 13229 ANSP Moore, 1962, p. 71

Tellina makelloides Gardner**Tellinidae**

Tellina makelloides Gardner, 1927, p. 374, figs. 41, 42

- Range*.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.
Locality.—TEXAS: Anderson Co., $\frac{3}{4}$ mi. S. of Elkhart (type)
Type.—Holotype, No. 369246 USNM

Tellina (Eurytellina) mooreana Gabb**Tellinidae**

Tellina Mooreana Gabb, 1860d, p. 387, pl. 67, fig. 56; Conrad, 1865a, p. 4; Heilprin, 1891a, p. 401; Gardner in ? Trowbridge, 1923, p. 95; Gardner, 1945, p. 106

Tellina (*Peronidia* ?) *papyria* Conrad, (*T. mooreana* Gabb) Dall, 1900, p. 1015 in part

Tellina papyria Conrad, Harris, 1919, p. 159 in part, pl. 49, fig. 10 var. *mooreana*, not figs. 7-9a, 11; Deussen, 1924, p. 67. Not Conrad, 1833c, p. 41

Tellina papyria Conrad var. *mooreana* Gabb, Renick and Stenzel, 1931, p. 104

Tellina (*Eurytellina*) *mooreana* Gabb, Stenzel, Krause, and Twining, 1957, p. 121, pl. 15, figs. 5, 6, 9, 10

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.; Stone City beds, middle Claiborne gr.

Localities.—TEXAS; "Caldwell Co.", Gabb (type)=*Burleson Co.*, Stone City Bluff, Brazos R. *fide* Stenzel, Krause, and Twining, 1957, p. 11; Cedar Cr. (Harris); *Brazos Co.*, Little Brazos R.; *Cherokee Co.* (Harris); *Gonzales Co.*, (Harris)

Type.—Holotype, No. 13260 ANSP (*fide* Stenzel, Krause, and Twining, 1957)

Tellina nitens (Lea)

See *Abra* (*Abra*) *nitens* (Lea)

Tellina nitens de Gregorio not Lea

See *Tellina cossmanni* Dall

Tellina ovalis (Lea)

See *Tellina leana* Dall

***Tellina* (*Eurytellina*) *papyria* Conrad**

Tellinidae

Tellina papyria Conrad, 1833c, p. 41 (Harris reprint, 1893, p. 67); Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 399, pl. 4, fig. 7; H. C. Lea, 1849, p. 106; d'Orbigny, 1850, p. 377; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 224, pl. 35, fig. 32; Cossmann, 1893, p. 9; Harris, 1895b, p. 32; Harris, 1919, p. 159 in part, pl. 49, figs. 7-9a, 11 not fig. 10; Brann and Kent, 1960, p. 842

Tellina (*Peronidia* ?) *papyria* Conrad, Dall, 1900, p. 1015 in part, not *mooreana*

Tellina (*Eurytellina*) *papyria* Conrad, Stenzel, Krause, and Twining, 1957, p. 122, pl. 15, figs. 7, 8

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon gr.] (type) upper Claiborne gr.; McBean fm., upper Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of Claiborne Bluff, Alabama R. (type), Lisbon Bluff, Alabama R.; Hamilton Bluff, Alabama R. MISS.: *Clark Co.*, Wautubbee. S.C.: *Orangeburg Co.*, 5 mi. W. of Orangeburg

Type.—Probable holotype, No. 30528 ANSP Moore, 1962, p. 83

Tellina papyria of authors not Conrad, 1833c

See *Tellina* (*Eurytellina*) *mooreana* Gabb

Tellina papyria mooreana Gabb

See *Tellina mooreana* Gabb

***Tellina pearlensis* Meyer**

Tellinidae

Tellina pearlensis Meyer, 1887a, [no page], pl. 2, fig. 3; Harris and Palmer, 1946, p. 104, pl. 22, fig. 18 copy Meyer

Although this species was figured by Meyer it was not described nor the locality of occurrence indicated. The type is available and labeled from Jackson, Miss.

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (label with type)

Type.—Holotype, No. 638894 USNM

Tellina perovata Conrad, 1865a, p. 4, Conrad, 1866a, p. 8=Oligocene, not Claiborne Eocene as in 1865a or Alabama as 1866a

***Tellina (Moerella) petropolitana* Stenzel and Krause**

Tellinidae

Tellina (Moerella) petropolitana Stenzel and Krause in Stenzel, Krause, and Twining, 1957, p. 123, pl. 22, figs. 10, 11

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Type.—Holotype, No. 20592 BEG

***Tellina (Angulus) plana* (Lea)**

Tellinidae

Egeria plana Lea, 1833, p. 54, pl. 1, fig. 24 (not fig. 25 as in text and expl. pl.); Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 35

Tellina plana (Lea), Conrad, App. in Morton, 1834, p. 7; Conrad, 1846c, p. 400, pl. 4, fig. 6; H. C. Lea, 1849, p. 106; Conrad, 1865a, p. 4; Conrad, 1866a, p. 8

Tellina subplana d'Orbigny, 1850, p. 377 new name

Donax plana (Lea), de Gregorio, 1890, p. 221, pl. 35, figs. 1, 2; fig. 11 copy Conrad; fig. 34 copy Lea not *ovalis* as in De Gregorio, not fig. 3 copy *ovalis* Lea

Tellina (Angulus) plana (Lea), Dall, 1900, p. 1016

Egerella plana (Lea), Cossmann, 1893, p. 9 footnote

Tellina (Angulus) subplana d'Orbigny, Harris, 1919, p. 163, pl. 50, fig. 3 copy Lea

This binomen *Tellina plana* Lea (as *Egeria*) is not preoccupied by *Trigonella plana* da Costa, 1778, p. 200, changed to *Tellina* by Donovan, 1801, pl. 64, fig. 1. Therefore, the new name *Tellina subplana* d'Orbigny, 1850 was not necessary as stated by Dall, 1900, and used by Harris, 1919. Da Costa's species is placed in *Scrobicularia piperata* Gmelin, Forbes and Hanley, 1848, p. 326

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5139 ANSP (Harris Cat. 1895c)

***Tellina (Angulus) prolenta* Aldrich**

Tellinidae

Tellina (Angulus) prolenta Aldrich, 1911, p. 4, pl. 1, fig. 5 (as *Angelus*); Harris, 1919, p. 162, pl. 49, fig. 17 copy Aldrich

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 639114 USNM

***Tellina quihi* Gardner**

Tellinidae

Tellina quihi Gardner, 1935, p. 187, pl. 16, fig. 12

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Locality.—TEXAS: Medina Co., 5.7 mi. NW. of Castroville on the Quihi rd. (type)

Type.—Holotype, No. 370924 USNM

Tellina (Arcopagia) raveneli Conrad

Tellinidae

Tellina Raveneli Conrad, App. in Morton, 1834, p. 7 *nomen nudum*; Conrad, 1846c, p. 400 (no pl. 5, fig. 1 as in text); H. C. Lea, 1849, p. 106 as [*Ravenelli*]; d'Orbigny, 1850, p. 377; Harris, 1895b, p. 39; Harris, 1919, p. 167, pl. 51, figs. 1-5; Brann and Kent, 1960, p. 843

Tellina (Arcopagia) Raveneli Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 8; de Gregorio, 1890, p. 225; Dall, 1900, p. 1016

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R.; base of Claiborne Bluff, Alabama R. (type). S.C.: Orangeburg Co., Orangeburg District

Types.—Probable syntypes (2), No. 30582 ANSP Moore, 1962, p. 92

Tellina (Arcopagia) raveneli weisbordi Harris

Tellinidae

Tellina (Arcopagia) raveneli weisbordi Harris in Harris and Palmer, 1946, p. 104, pl. 22, fig. 19; Brann and Kent, 1960, p. 843

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—LA.: Grant Par., Montgomery, Red R. (type)

Type.—Holotype, No. 4378 PRI

Tellina santander Gardner

Tellinidae

Tellina sp. A. Gardner, 1923, p. 113 in part, pl. 32, not fig. 9 as *fide* Gardner, 1945, p. 105; fig. 8 *fide* D. Wilson, per com., 6/16/62

Tellina santander Gardner, 1945, p. 105, pl. 4, fig. 12 same description (*verbatim*) as 1923, p. 113

Range.—Middle Eocene. Laredo fm. (type), upper Claiborne gr.

Localities.—TEXAS: Zapata Co., Rio Grande at Rancho La Perla, 4 mi. S. of Webb Co. line (type) USGS sta. 6436. For Mexican localities see Gardner, 1945, p. 106

Type.—Holotype, No. 352271 USNM

Tellina scandula Conrad

See *Macoma scandula* (Conrad)

Tellina semipapyria Aldrich

Tellinidae

Tellina semipapyria Aldrich, 1921, p. 18, pl. 2, fig. 18

Tellina sp. cf. *Tellina semipapyra* [sic] Barry, 1942+, p. 72

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr. (Barry)

Localities.—ALA.: Wilcox Co., "Jacksons Rock House Branch" (type)—Rock House Cr., SW. Wilcox Co. in secs. 11 and 15, T. 11 N., R. 4 E. (La Moreaux and Toulmin, 1959); Clarke Co., Woods Bluff, Tombigbee R. Cf. TEXAS; Sabine Co., Sabinetown, Sabine R.

Type.—Holotype, No. 36 GSATC

Tellina semirotonda Aldrich**Tellinidae**

Tellina semirotonda Aldrich, 1921, p. 18, pl. 2, fig. 17

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.; Bells Ldg. mem., Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.; Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.

Types.—Syntypes, No. 58 GSATC

Tellina sillimani Conrad

See *Macoma sillimani* (Conrad)

Tellina spillmani Dall**Pl. 2, fig. 1 Tellinidae**

Tellina (Angulus) albaria Conrad, 1865b, p. 138, pl. 11, fig. 7; Conrad, 1866a, p. 24 (not p. 7=Oregon). Not *T. albaria* Conrad, 1849, p. 725; Dall reprint, 1909, p. 154

Tellina (Arcopagia?) spillmani Dall, 1900, p. 1015. New name for *T. albaria* Conrad, 1865b, p. 138

Tellina spillmani Dall, Harris and Palmer, 1946, p. 104, pl. 22, fig. 20 copy Conrad

Range.—Upper Eocene. Lower Jackson gr. (type)

Locality.—MISS.: Clarke Co., Garland Cr. (type) ["Enterprise" error. See Aldrich, 1885c, p. 307]

Type.—Possible holotype *Tellina albaria* Conrad, No. 13219 ANSP Moore, 1962, p. 35

Tellina (Arcopagia) spillmani corvia Harris**Tellinidae**

Tellina (Arcopagia) spillmani var. *corvia* Harris in Harris and Palmer, 1946, p. 105, pl. 22, fig. 21; Brann and Kent, 1960, p. 844

Range.—Upper Eocene. Upper Jackson gr. (type)

Locality.—ARK.: St. Francis Co., at Highway 70 bridge over Crow Cr., 2 mi. E. of Forrest City (type)

Type.—Holotype, No. 4379 PRI

Tellina subequalis Conrad**Tellinidae**

Tellina subequalis Conrad, 1848a, p. 298; Conrad, 1848b, p. 129, pl. 14, fig. 8; Harris, 1919, pp. 71, 161 suggests internal mold of *T. papyria*; Dall, 1900, p. 1016

Tellina (Arcopagia) subequalis Conrad, Conrad, 1865a, p. 5; Conrad, 1866a, p. 8

Range.—Middle Eocene. Age undetermined

Locality.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing ANSP Moore, 1962, p. 98

Tellina subfilosa d'Orbigny

See *Garum filosa* (Conrad)

Tellina subplana d'Orbigny

See *Tellina plana* (Lea)

Tellina subtriangularis Aldrich**Tellinidae**

Tellina subtriangularis Aldrich, 1895b, p. 18, pl. 5, figs. 8, 8a; Harris, 1897b, p. 73 in part, pl. 14, figs. 11a-c; Brann and Kent, 1960, p. 844
Tellina (Angulus) subtriangularis Aldrich, Dall, 1900, p. 1016 [not *T. williamsi* Clark, 1895 *vide* Dall]

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R., (type); *Clarke Co.*, Woods Bluff, Tombigbee R.; *Monroe Co.*, 4 mi. above Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark

Type.—Holotype, No. 638967 USNM

Tellina subtriangularis Aldrich, Harris, 1897b

See also *T. williamsoni* Clark

Tellina tallicheti Harris**Tellinidae**

Tellina tallicheti Harris, 1895a, p. 51, pl. 3, fig. 1; Harris, 1919, p. 158, pl. 49, figs. 3-5; Brann and Kent, 1960, pp. 844, 845

Tellina (Arcopagia) tallicheti Harris, Dall, 1900, p. 1016

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.; Cook Mt. fm. upper Claiborne gr.; McBean fm., upper Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type). ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R. S.C.: *Orangeburg Co.*, 6 mi. NW. of Orangeburg

Type.—Holotype, No. 1215 PRI

Tellina temperata Aldrich**Tellinidae**

Tellina temperata Aldrich, 1911, p. 4, pl. 1, fig. 6

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

Type.—Holotype missing USNM 1962; not in GSATC, 1962

Tellina (Arcopagia) trumani Harris**Tellinidae**

Tellina (Arcopagia) trumani Harris, 1897b, p. 73, pl. 12, fig. 15; pl. 14, figs. 10, 10a; Dall, 1900, p. 1016; Brann and Kent, 1960, p. 845

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

Types.—Syntypes, Nos. 170, 230, 231 PRI

Tellina trumani australina Harris**Tellinidae**

Tellina trumani var. *australina* Harris, 1919, p. 159, pl. 49, figs. 6, 6a; Brann and Kent, 1960, p. 845

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: *Orangeburg Co.*, Orangeburg district (type)

Type.—Holotype, No. 1217 PRI

Tellina trumani garlandica* Harris*Tellinidae**

Tellina trumani var. *garlandica* Harris in Harris and Palmer, 1946, p. 100, pl. 22, figs. 1-3; Brann and Kent, 1960, p. 845

Range.—Upper Eocene. Lower Jackson gr. (type)

Locality.—MISS.: *Clarke Co.*, Garland Cr., near Shubuta (type)

Type.—Holotype, No. 4363 PRI

Tellina vauhani* Cooke*Tellinidae**

Tellina vauhani Cooke, 1926b, p. 138, figs. 16a-b; Harris and Palmer, 1946, p. 102 description corrected, pl. 22, figs. 13-16; Brann and Kent, 1960, p. 845

Range.—Middle Eocene. Gosport sd., uppermost Claiborne gr.

Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type);

Clarke Co., Garland Cr. ALA.: *Washington Co.*, Gopher Hill (Baker's Bluff), Tombigbee R.

Type.—Holotype, No. 353952 USNM

Tellina vauhani* Cooke variation*Tellinidae**

Tellina vauhani Cooke "var." Harris and Palmer, 1946, p. 103, pl. 22, fig. 17; Brann and Kent, 1960,, p. 846

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Moodys Branch, Jackson

Type.—Figured specimen, No. 4377 PRI

Tellina Vicksburgensis Conrad, Meyer, 1885b in part

See *Tellina vicksburgensis moodiana* Cooke

Tellina vicksburgensis moodiana* Cooke*Tellinidae**

Tellina vicksburgensis var. *robusta* Meyer, 1885a, p. 461. Not *T. robusta* Hanley, 1844, p. 63

Tellina Vicksburgensis Conrad, Meyer, 1885b, p. 72 in part

Tellina vicksburgensis var. *moodiana* Cooke, 1926b, p. 137, figs. 15a, b; Harris and Palmer, 1946, p. 101, pl. 22, figs. 4-8; Brann and Kent, 1960, p. 846

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type)

Type.—Holotype, No. 353951 USNM

Tellina (Angulus) virginiana* Clark*Tellinidae**

Tellina virginiana Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 15, fig. 4

Tellina greggi Harris, 1897b, p. 72 in part

Tellina (Angulus) virginiana Clark, Dall, 1900, pp. 1015, 1016; Clark and Martin, 1901, p. 166, pl. 33, fig. 3 [misspelled *Angelus*]

Range.—Paleocene. Aquia fm. (type probably). Lower Eocene. Nanjemoy fm. (larger casts)

Localities.—MD.: *Charles Co.*, Popes Cr.; E. and W. of Port Tobacco; 2½-3 mi. above Popes Cr.; Clifton Beach; 1 mi. SE. of Mason Springs; *Prince Georges Co.*, Charles Branch between Rosaryville and Upper Marlboro; Fort Washington. VA.: *King George Co.*, Woodstock; 2 mi. below Potomac Cr.; *Stafford Co.*, Aqui Cr.; [*Hanover ?*] *Co.*, Hanoverville

Type.—Holotype, USNM

Tellina williamsi Clark**Tellinidae**

Tellina williamsi Clark, 1895, p. 5; Clark, 1896, p. 76, pl. 15, figs. 3a, 3b

Tellina subtriangularis Aldrich, Harris, 1897b, p. 73 in synonymy

Tellina (*Peronidia* ?) *Williamsi* Clark, Dall, 1900, p. 1016; Clark and Martin, 1901, p. 167, pl. 33, figs. 2, 2a

Range.—Paleocene. Aquia fm. (type). Lower Eocene, Nanjemoy fm.

Localities.—MD.: Charles Co., Popes Cr.; 2½ mi. above Popes Cr.
VA.: Stafford Co., Potomac Cr. (type); King George Co., Woodstock

Type.—Holotype, USNM

Tellina sp.

See *Tellina estellensis* Aldrich

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1919, pp. 161, 162, pl. 49, figs. 13, 14; pl. 50, fig. 21; Brann and Kent, 1960, p. 844

Range.—Middle Eocene. McBean fm., upper Claiborne gr.

Locality.—GA.: Clay Co., Fort Gaines

Types.—Figured specimens, Nos. 1221, 1222, 1228 PRI

Tellina sp. A.**Tellinidae**

Tellina sp. A. Gardner, 1923, p. 113 in part, pl. 32, fig. 9 only; fig. 8 = *T. santander* Gardner, 1945, p. 105. See *T. santander*.

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: Webb Co., 4 mi. SE. of Laredo; 1 mi. W. of Canada Verde ranch; Zapata Co., 3½ mi. above San Ygnacio; Lopeño post office

Type.—Figured specimen, No. 352270 USNM

Tellina sp.**Tellinidae**

Tellina sp. Gardner, 1935, p. 187

Range.—Paleocene. Midway gr.

Locality.—TEXAS: Medina Co., 5.7 mi. NW. of Castroville (USGS Sta. 11769)

Type.—Unfigured specimen not found USNM, 1962

Tellina sp.**Tellinidae**

Tellina sp. Gardner, 1935, p. 188

Range.—Paleocene. Wills Point fm., upper Midway gr.

Locality.—TEXAS: Guadalupe Co., 2½ mi. above power house S. of Sequin

Type.—Unfigured specimen not found USNM, 1962

Tellina sp.**Tellinidae**

Tellina sp. Barry, 1942+, p. 71, pl. 11, fig. 2

Range.—Lower Eocene. Pendleton Ferry fm., middle Wilcox [Sabine] gr.

Locality.—LA.: For localities in Sabine Par. see Barry, p. 71

Type.—Figured specimen, LSU Pal. Mus.

Tellina sp. Barry, 1942+, p. 71, pl. 9, figs. 8, 9

See ? *Crassatella* sp. Harris, 1899b

Tellina, n. sp.**Tellinidae**

Tellina n. sp., Harris, 1899b, no page, pl. 53, fig. 8 never described

Range.—Probably Eocene

Locality.—Unknown

Type.—Unknown

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1951, p. 24, pl. 13, fig. 1; Brann and Kent, 1960, p. 844

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Plant 2, Clinchfield quarry

Type.—Figured specimen, No. 24518 PRI

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1951, p. 24, pl. 13, fig. 2 ("Macoma-like"); Brann and Kent, 1960, p. 844

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Georgia Lime Rock Quarry, 3.9 mi. from Perry

Type.—Figured specimen, No. 24519 PRI

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1951, p. 24, pl. 13, fig. 3; Brann and Kent, 1960, p. 844

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Pennsylvania Cement Corp., Plant 2, Clinchfield quarry

Type.—Figured specimen, No. 24520 PRI

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1951, p. 24, pl. 13, fig. 4 "Metis-like"; Brann and Kent, 1960, p. 844

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Georgia Lime Rock quarry about 4 mi. from Perry

Type.—Figured specimen, No. 24521 PRI

Tellina sp.**Tellinidae**

Tellina sp. Harris, 1951, p. 24, pl. 13, fig. 9; Brann and Kent, 1960, p. 844

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: *Marion Co.*, Florida Lime Products Co., old Camp Quarry, about 2.2 mi. from main office 12th and Limekiln sts., Ocala

Type.—Figured specimen, No. 24526 PRI

Teredo emacerata* Whitfield*Teredinidae**

Teredo emacerata Whitfield, 1885, p. 242, pl. 30, fig. 25; Dall, 1898b, p. 812; Whitfield, 1899, p. 165

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Shark R. (type)

Type.—Holotype, No. 7854, State Mus., Trenton, N.J.

Teredo maverickensis* Gardner*Teredinidae**

Teredo maverickensis Gardner, 1923, p. 114, pl. 32, fig. 11; (not given in text); Trowbridge, 1932, pl. 31, fig. 4 type; Gardner, 1935, p. 196

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Locality.—TEXAS: *Maverick Co.*, Rio Grande, lower end of Maverick Co., about 40 ft. below Midway, Wilcox contact (type) (USGS Sta 10277)

Type.—Holotype, No. 352272 USNM

Teredo mississippiensis* Conrad*Teredinidae**

Teredo mississippiensis Conrad in Wailes, 1854, p. 289, pl. 16, fig. 8 (reprint 1939, p. 19, pl. 3, fig. 8); Conrad, 1866a, p. 24; Dall, 1898b, p. 812; Harris and Palmer, 1946, p. 120, pl. 25, fig. 12; Brann and Kent, 1960, p. 854

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Town Cr., Jackson (type). LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell and Catahoula Pars.*, Ouachita R.

Types.—Holotype +4 remaining specimens, No. 13192 ANSP Moore, 1962, p. 77

Teredo ringens* Aldrich*Teredinidae**

Teredo ringens Aldrich, 1921, p. 17, pl. 2, fig. 12

Teredo ? ringens Aldrich, Gardner, 1935, p. 195; Gardner, 1945, p. 140 in part

Range.—Paleocene. Sucarnoochee cl., Porters Creek fm. (type), upper Midway gr.; Wills Point fm., upper Midway gr.

Localities.—ALA.: *Wilcox Co.*, 3 mi. S. of Estelle (type). TEXAS: *Guadalupe Co.*, 1½ mi. W. of Fentress; *Maverick Co.*, 27 mi. SE. of Eagle Pass on the Windmill (Jacal) ranch rd.

Type.—Holotype, No. 5, GSATC

Teredo simplex* Lea*Teredinidae**

Teredo simplex Lea, 1833, p. 38, pl. 1, fig. 6; H. C. Lea, 1849, p. 106; Conrad, 1865a, p. 2; Conrad, 1866a, p. 9; de Gregorio, 1890, p. 237 believed a *Serpula*; Harris, 1895b, p. 42; Dall, 1898b, p. 812; Harris, 1919, p. 199, pl. 59, fig. 16 copy Lea

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5019 ANSP

Teredo simplexopsis de Gregorio**Teredinidae**

Teredo simplexopsis de Gregorio, 1890, p. 236, pl. 38, figs. 26, 26a, 26b; Cossmann, 1893, p. 5; Dall, 1898b, p. 813; Harris, 1919, p. 199, pl. 59, fig. 17 copy DeGregorio

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 26449 De Gregorio Coll. PRI

Teredo tibialis Morton

See *Polorthus tibialis* (Morton)

Teredo virginiana Clark**Teredinidae**

Teredo virginiana Clark, 1895, p. 5; Clark, 1896, p. 72, pl. 15, figs. 5a-c; Dall, 1898b, p. 813; Clark and Martin, 1901, p. 160, pl. 30, figs. ?1, ?1a, 2, 2a, 3

Range.—Paleocene. Aquia fm. (Clark and Martin). Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: Charles Co., ½ mi. below Chapel Point; W. of Port Tobacco; 1 mi. SE. of Mason Springs; Clifton Beach; Prince Georges Co., Hills Bridge; Upper Marlboro (deep cut near Chesapeake Beach, R.R. station); Upper Marlboro; 1 mi. NE. of Piscataway. VA.: King George Co., Woodstock (type); 2 mi. below Potomac Cr.; Prince George Co., Evergreen, James R.

Types.—Syntypes, USNM

Textivenus reticulpta (Meyer)**Veneridae**

Venus reticulpta Meyer, 1886b, p. 84, pl. 1, figs. 27, 27a; de Gregorio, 1890, p. 220, pl. 34, figs. 25-27 copies Meyer; Cossmann, 1893, p. 9

Marcia reticulpta (Meyer), Harris, 1919, p. 153, pl. 47, figs. 16-19

Marcia (*Katelsysia*) *reticulpta* (Meyer), Palmer, 1927/1929, p. 136, pl. 26, figs. 1-4 section *Textivenus*; Brann and Kent, 1960, p. 526

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638854 USNM

Thracia estiva de Gregorio, 1890, p. 230, pl. 36, figs. 21, 25; Cossmann, 1893, p. 7; Dall, 1903a, p. 1527; Harris, 1919, p. 200

Age and locality doubtful. De Gregorio did not know its origin. Type is lost. Included for completeness.

Timothythus anteproductus (Harris)**Ungulinidae**

Sphaerella (?) *anteproducta* Harris, 1895a, p. 50, pl. 2, fig. 4

Diplodonta turgida (Conrad), Dall, 1900, p. 1181, in part

Sphaerella anteproducta Harris, 1919, p. 124, pl. 40, fig. 6 copy holotype, figs. 7, 8, 8a, 8b; Brann and Kent, 1960, p. 806

Diplodonta (*Sphaerella*) *anteproducta* Harris, Gardner, 1945, p. 98 in part, ? pl. 7, figs. 2, 5

Diplodonta (*Timothythus*) *anteproducta* (Harris), Harris and Palmer, 1946, p. 87

Timothythus anteproducta (Harris), Chavan, 1962, p. 16

The type locality of *Timothythus anteproductus* (Harris) is not given in Harris' (1895a) original description. It is grouped among several

Texas localities. G. D. Harris' original Texas manuscript (never published except in parts) is in the library of the Paleontological Research Institution. The manuscript description of *T. anteproductus* is the same as published except under "Type specimen.—" reads . . . "Singley's Collection Mus. No. 364, Sta. 86." Sta. 86 in the east. is "Dr. Collard's farm, Town Branch, two hundred and fifty yards east of west boundary line of W. C. Sparks headright, Brazos County, M. Nagle."

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—TEXAS: *Brazos Co.*, Dr. Collard's farm, Sparks Headright (type); *Smithville, Colorado R.*; *Robertson Co.*, Cedar Cr., Wheelock League; *Cherokee Co.*, cutting on Tyler and Southeastern R.R., 400 yds. S. of mile post No. 23; *Lee Co.*, Elm Cr. LA.: *Winn Par.*, St. Maurice; Cedar Bluff, Saline Bayou (not Sabine R. as in Harris, 1919), Red R.; Marble Quarry; *Natchitoches Par.*, Natchitoches; *Caddo Par.*, Vivian. Miss.: *Clarke Co.*, McLeods Mill, Suwanlovey Cr.

Type.—Lost, Bur. Ec. Geol., Univ. Texas, *fide* Rodda, 1962

Timothyus bulla (Conrad)

Ungulinidae

Sphaerella bulla Conrad, 1865b, p. 138, pl. 10, fig. 9; Conrad, 1866a, p. 24; Harris, 1919, p. 125, pl. 40, fig. 9; Brann and Kent, 1960, p. 806

Diplodonta turgida (Conrad), Dall, 1900, p. 1181 in part

Diplodonta (Timothyus) bulla (Conrad), Harris in Harris and Palmer, 1946, p. 86, pl. 19, figs. 12-16 as *Sphaerella (Timothyus)*; Brann and Kent, 1960, p. 329

Timothyus bulla (Conrad), Chavan, 1962, pp. 15 [*Timothymus sic*], 16, fig. 12

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (type)

Localities.—MISS.: *Clarke Co.*, "Enterprise"—Garland Cr. (type), *fide* Aldrich, 1885c, p. 307; *Hinds Co.*, Moodys Branch and Town Cr., Jackson. LA.: *Winn Par.*, Tullos.; *Catahoula Par.*, Danville Ldg., Ouachita R. ARK.: *Cleveland Co.*, Vince Bluff to Kingsland, Saline R.

Types.—Probable syntypes (2), No. 13222 ANSP, Moore, 1962, p. 43; "badly broken" [*fide* Harris and Palmer, 1946, p. 88]

Timothyus deflatus Harris

Ungulinidae

Diplodonta (Timothyus) deflata Harris in Harris and Palmer, 1946, p. 88, pl. 19, figs. 17, 18; Brann and Kent, 1960, p. 330

Timothyus deflatus Harris, Chavan, 1962, p. 16

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, No. 4324 PRI

Trachycardium (Agnocardia) claibornense (Aldrich)

See *Agnocardia claibornensis* (Aldrich)

Trachycardium ouachitense (Harris)

Cardiidae

Cardium ouachitense Harris, 1919, p. 132, pl. 42, fig. 1; Brann and Kent, 1960, p. 177

- ~ *Range*.—Middle Eocene. Cook Mt. fm., upper Claiborne gr. (type)
Locality.—LA.: *Union Par.*, Long Point, ½ mi. below Alabama
 Ldg., Ouachita R. (type)
Type.—Holotype, No. 1143 PRI

Trapezium claibornense Dall**Arcticiidae**

Trapezium claibornense Dall, 1900, p. 1199 (figured only), pl. 43, figs. 9, 10; Dall, 1903a, p. 1498; Schuchert, *et al.*, 1905, p. 660; Harris, 1919, p. 154, pl. 48, figs. 3, 4; Brann and Kent, 1960, p. 871

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 107794 USNM

Trigonarca (Latiarca) gigantea (Conrad)

See *Cucullaea (Latiarca) gigantea* Conrad

Trigonarca (Latiarca) idonea (Conrad)

See *Glycymeris idonea* (Conrad)

Trigonarca (Latiarca) ononchela [sic] (Rogers and Rogers)

See *Cucullaea (Latiarca) gigantea* Conrad

Trigonarca pulchra (Gabb) var. Harris

See *Pachecoa (Pachecoa) microcancellata* (Barry)

Trigonarca (Latiarca) transversa (Rogers and Rogers)

See *Cucullaea transversa* Rogers and Rogers

Trigonia divaricata Tuomey**Trigoniidae**

Trigonia divaricata Tuomey, 1853, p. 193; Stephenson, 1923, p. 192 "divericata" [sic]

Range.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

Locality.—N.C.: *New Hanover Co.*, Wilmington (type)

Type.—Unknown

Trigonia lunata Tuomey**Trigoniidae**

Trigonia lunata Tuomey, 1853, p. 193

Range.—Cretaceous mixed with Eocene. Near Wilmington, N.C.

Cretaceous is in contact with Tertiary (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

Locality.—N.C.: *New Hanover Co.*, Wilmington (type)

Type.—Unknown

Trigoniocardia (Americardia) avona (Richards)**Cardiidae**

Cardium (Anthocardia) [sic] *avonum* Richards in Richards and Palmer, 1953, p. 53, pl. 11, fig. 9 *Acanthocardia*

Range.—Middle Eocene. Avon Park ls. (type), upper Claiborne gr.

Locality.—FLA.: *Levy Co.*, ledges in timber road NW. corner, SW. ¼, sec. 14, T. 14 S., R. 15 E. (type)

Type.—Holotype (plastocast), No. I-7575 Fla. Geol. Surv.

Trigoniocardia (Americardia) protoallicula (Richards) **Cardiidae**

Cardium (Trigoniocardium) protoalliculum Richards in Richards and Palmer, 1953, p. 52, pl. 12, figs. 1-3

Range.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm. (type), lower Ocala gr.

Localities.—FLA.: Levy Co., rd. metal pit 2.9 mi. S. of N. limits of town of Gulf Hammock, just SW. of State Road 55 in SW. ¼ sec. 34, T. 14 S., R. 16 E. (type); Sulphur Springs Landing, left bank Wekiva R., SW. ¼ NW. ¼ sec. 32, T. 14 S., R. 16 E.

Types.—Holotype, No. I-7572; paratypes, Nos. I-7571, I-7573, Fla. Geol. Sur.

Trigonoarca [sic] decisa (Conrad)

See *Pachecoa (Pachecoa) decisa* (Conrad)

Trigonoarca [sic] decisa Conrad var.

See *Pachecoa (Pachecoa) decisa* Conrad var.

Trigonoarca [sic] declivis (Conrad)

See *Pachecoa (Pachecoa) declivis* (Conrad)

Trigonoarca [sic] ellipsis (Lea)

See *Pachecoa (Stenzelia) ellipsis* (Lea)

Trigonoarca [sic] perplana (Conrad)

See *Pachecoa (Stenzelia) perplana* (Conrad)

Trigonocoelia cuneus (Conrad)

See *Trinacria cuneus* (Conrad)

Trigonocoelia ledoides Meyer

See *Pachecoa (Pachecoa ?) ledoides* (Meyer)

Trigonodesma decisa (Conrad)

See *Pachecoa (Pachecoa) decisa* (Conrad)

Trigonodesma pulchra (Gabb)

See *Pachecoa (Pachecoa) pulchra* (Gabb)

Trinacria adamsi Palmer

See *Pachecoa (Pachecoa) adamsi* (Palmer)

Trinacria (Pachecoa) cainei Harris

See *Pachecoa (Pachecoa) cainei* Harris

Trinacria corvamnisi Harris

See *Pachecoa corvamnisi* (Harris)

Trinacria cossmanni (Dall)

See *Nanohalus cossmanni* (Dall)

Trinacria cuneus (Conrad)**Noetiidae**

Pectunculus cuneus Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 6; Harris, 1895b, p. 14

Nucula carinifera Lea, 1833, p. 198, pl. 6, fig. 212; H. C. Lea, 1849, p. 102; Conrad, 1865a, p. 12; Conrad, 1866a, p. 4; de Gregorio, 1890, p. 186; Harris, 1895b, p. 10; Schenck, 1934, p. 49

Limopsis cuneus (Conrad), Conrad, 1860, p. 297, pl. 47 (not pl. 46), fig. 17

Trigonocoelia cuneus (Conrad), Conrad, 1865a, p. 12 (misspelled *Trigonocoelix*); Conrad, 1866a, p. 4; Heilprin, 1884b, p. 89
Limopsis (*Trigonocoelia* [sic]) *cuneus* (Conrad), de Gregorio, 1890, p. 191, pl. 23, fig. 28b copy Conrad

Trinacria cuneus (Conrad), Cossmann, 1893, p. 15; Dall, 1998b, pp. 577, 604; Harris, 1919, p. 37, pl. 18, figs. 8, 9; Stewart, 1930, p. 82; Stenzel, Krause, and Twining, 1957, p. 70; Brann and Kent, 1960, p. 875

Range.—Middle Eocene. McBean fm., upper Claiborne gr. (Stenzel, Krause, and Twining, 1957, p. 70); Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). S. C.: Orangeburg Co., Orangeburg (Stenzel, Krause, and Twining, 1957, p. 70)

Types.—Probably syntypes (2), No. 30567 ANSP, Moore, 1962, p. 51

Trinacria decisa (Conrad)

See *Pachecoa* (*Pachecoa*) *decisa* (Conrad)

Trinacria decisa (Conrad) "var."

See *Pachecoa* (*Pachecoa*) *decisa* (Conrad) "var."

Trinacria decisa abbreviata Harris

See *Pachecoa* (*Pachecoa*) *decisa abbreviata* (Harris)

"*Trinacria decisa carolina*" Harris

Noetiidae

Trinacria decisa var. *carolina* Harris, 1919, p. 41, pl. 18, figs. 18, 18a; Brann and Kent, 1960, p. 876

"*Trinacria decisa* var. *carolina* Harris", Stenzel, Krause, and Twining, 1957, p. 70

For "T." *decisa* see *Pachecoa decisa* (Conrad)

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Localities.—S.C.: Orangeburg Co., 3 and 6 mi. WNW. of Orangeburg (type)

Type.—Holotype, No. 505 PRI

Trinacria declivis (Conrad)

See *Pachecoa* (*Pachecoa*) *declivis* (Conrad)

Trinacria declivis (Conrad), Renick and Stenzel

See *Pachecoa* (*Pachecoa*) *sabinica* (Harris)

Trinacria ellipsis lisbonensis Harris

See *Pachecoa lisbonensis* (Harris)

Trinacria ledoides (Meyer)

See *Pachecoa* (*Pachecoa* ?) *ledoides* (Meyer)

Trinacria microcancellata Barry

See *Pachecoa* (*Pachecoa*) *microcancellata* (Barry)

Trinacria ovalis Harris

See *Pachecoa ovalis* (Harris)

Trinacria pectuncularis (Lea)

See *Pachecoa* ? (*Pachecoa* ?) *pectuncularis* (Lea)

Trinacria perplana (Conrad)

See *Pachecoa* (*Stenzelia*) *perplana* (Conrad)

Trinacria pulchra (Gabb)See *Pachecoa* (*Pachecoa*) *smithvillensis* Stenzel and TwiningSee also *Pachecoa* (*Pachecoa*) *pulchra* (Gabb)See also *Pachecoa* (*Pachecoa*) *pulchra* (Gabb) variations*Trinacria pulchra sabinica* HarrisSee *Pachecoa* (*Pachecoa*) *sabinica* (Harris)*Triquetra aequorea* (Conrad)See *Mactropsis aequorea* (Conrad)*Triquetra rectilinearis* (Conrad)See *Mactropsis rectilinearis* (Conrad)*Variamussium alabamensis* (Aldrich), Sacco, 1897c, p. 50See *Amusium* (*Propeamusium*) *alabamense* (Aldrich)*Variamussium calvatum* (Morton), Sacco, 1897c, p. 50See *Eburneopecten calvatus* (Morton)**Veleda equilatera** Whitfield**Mactridae***Veleda equilatera* Whitfield, 1885, p. 238, pl. 30, fig. 17; Whitfield, 1899, p. 166*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.*Locality*.—N. J.: Monmouth Co., Shark R. (type)*Type*.—Holotype, No. 7857 State Mus., Trenton, N.J.*Veleda nasuta* WhitfieldSee *Periplomya truncata* Whitfield**Venericardia (Pleuromeris) aldrichi** Harris**Carditidae***Pleuromeris aldrichi* Harris, 1919, p. 95, pl. 32, figs. 26-29; Harris and Palmer, 1946, p. 75; Brann and Kent, 1960, p. 714*Range*.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.*Locality*.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)*Type*.—Holotype, No. 700 PRI*Venericardia alticosta* of authorsSee *V. alticostata* Conrad**Venericardia (Claibornicardia) alticostata** (Conrad) Pl. 2, figs 10, 11**Carditidae***Cardita alticostata* Conrad, 1833a, p. 342; Conrad, App. in Morton, 1834, p. 7 in part; H. C. Lea, 1849, p. 97; Bronn, 1848a, p. 224 in part; not Tuomey, 1848, p. 153; d'Orbigny, 1850, p. 384 in part; Tuomey, 1858, pp. 264, 273 *alti-costa*; not Heilprin 1891a, p. 402 (as *alticosta*); Harris, 1895b, p. 4*Venericardia transversa* Lea, 1833, p. 68, pl. 2, fig. 46; Conrad, App. in Morton, 1834, p. 7 = *C. alticostata*; Bronn, 1848b, p. 1352; H. C. Lea, 1849, p. 107; Tuomey, 1858, p. 268; Harris, 1895b, p. 46 = *C. alticostata* Conrad*Venericardia alticostata* (Conrad), Conrad, 1865a, p. 7; Conrad, 1866a, p. 5 [as *alticosta*]; Aldrich, 1886, p. 44 [as *alticosta*]; Dall, 1903a, p. 1423; Harris, 1896, p. 57 in part; not Harris, 1897b, p. 55, pl. 11, fig. 1; Tarr, 1906, p. 437, fig. 6; Harris, 1919, p. 82 in part, pl. 30, figs. 3-5, 12 not figs. 1, 2 = *V. sillimani* Lea; Rutsch, 1943, p.

- 156; Verastegui, 1953, pp. 40, 42; Brann and Kent, 1960, p. 952 in part.
 Not "? *Cardita alticosta*" Gabb, 1869, p. 268 = *Cardita arivechensis*, n.n. Heilprin, 1891b, Mexican species, p. 452
Cardita (Venericardia) transversa Lea Mut. *transversa* Lea, de Gregorio, 1890, pp. 211, 212, pl. 30 (not 31 as in text), fig. 17 copy Lea, figs. 18-22
Cardita transversa (Lea), Cossmann, 1893, p. 14 in part
Venericardia (Glyptoactis) alticostata (Conrad), Stewart, 1930, p. 151; Gardner, 1935, pp. 157, 162 in part
Venericardia alticosta [sic] (Conrad), Shimer and Shrock, 1944, p. 419 in part
Venericardia (Claibornicardia) alticostata (Conrad), Stenzel, Krause, and Twining, 1957, pp. 104-109, pl. 13, figs. 1-9; pl. 14, fig. 5; text fig. 17. See for synonymy.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Possible syntypes, No. 30562 ANSP Moore, 1962, p. 36

- Venericardia alticostata* (Conrad), Dall, 1903a, in part; Harris, 1919, p. 82, pl. 30, figs. 1, 2

See *Venericardia (Claibornicardia) sillmani* Lea

- Venericardia alticostata* (Conrad) var. Harris, 1896

See *Venericardia* (?) *wilcoxensis* Dall

See also *Venericardia* (?) *whitei* Gardner

See also *Venericardia* (?) *hesperia* Gardner

- Venericardia alticostata* (Conrad) var. Harris, 1897b

See *Venericardia (Venericor) greggiana* Dall

***Venericardia (Claibornicardia) alticostata* (Conrad) "var." Carditidae**

- Venericardia alticostata* Conrad "var." Harris, 1919, p. 84, pl. 31, figs. 1-4; Brann and Kent, 1960, p. 952

Range.—Lower Eocene. Bashi mem., Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R.

Types.—Figured specimens, Nos. 668-671 PRI

- Venericardia alticostata hesperia* Gardner

See *Venericardia* (?) *hesperia* Gardner

- Venericardia alticostata whitei* Gardner

See *Venericardia* (?) *whitei* Gardner

***Venericardia (Venericor) angustoscrobis* Gardner and Bowles Carditidae**

- Venericardia (Venericor) angustoscrobis* Gardner and Bowles, 1939, p. 175, pl. 38, figs. 4, 7, cf. 3, 8

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. USGS sta. 13060 (type)

Type.—Holotype, No. 372691 USNM

"*Venericardia antiquata* Whitfield", Gardner and Bowles, 1939, p. 145 is a *nomen nudum*. Not *Cardita antiquata* (Linné), 1767, p. 1138

["*Venericardia antiquata*" (Linné), Dall, 1903a, p. 1409.]

This name is certainly an error for *V. perantiqua* Conrad, 1865a which was included by Whitfield, 1885, p. 232 in the Shark River marl. No venericardid species of this name was described by Whitfield. Whitfield compared *V. perantiqua* with *V. rotunda* Lee as did Gardner and Bowles which suggests that Gardner and Bowles were referring to the same species.

Venericardia* (*Venericor*) *apodensata* Gardner and Bowles **Carditidae*

Venericardia (*Venericor*) *apodensata* Gardner and Bowles, 1939, p. 192, pl. 37, fig. 13; pl. 43, fig. 8; pl. 45, figs. 15, 16; Harris and Palmer, 1946, p. 66, pl. 15, figs. 3, 4

Venericardia planicosta Lamarck "var." Brann and Kent, 1960, p. 961

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Moodys Branch, Jackson USGS sta. 6462 (type); S. of pump house, Jackson; gully S. of the rd. E. of flag station on Yazoo and Miss. Valley R.R.; *Clarke Co.*, 4½ mi. NE. of Shubuta. For localities in ALA., ARK., LA., and TEXAS see Gardner and Bowles, 1939, p. 193.

Types.—Syntypes, Nos. 369599, 136644 USNM

Venericardia* *aposmithii* Gardner and Bowles **Carditidae*

Venericardia planicosta Lamarck form β Harris, 1897b, p. 55, pl. 9, figs. 1, 2; Brann and Kent, 1960, p. 960 No. 156 only

Venericardia regia Conrad, Dall, 1903a, p. 1422 in part; Stewart, 1930, pp. 154-156

Cf. *Venericardia planicosta* Lamarck, Scott, 1932, p. 328, pl. 23, fig. 1; Not Lamarck, 1801, p. 123

Venericardia (*Venericor*) *aposmithii* Gardner and Bowles, 1939, p. 186, pl. 43, figs. 1, 6 copy Harris, 7; pl. 44, figs. 1, 2

Range.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R., sec. 36, T. 10 N., R. 6 E., (type), Greggs Ldg., Alabama R.; *Wilcox Co.*, Yellow Bluff, Alabama R.; *Marengo Co.*, Nanafalia Bluff, Tombigbee R.; *Choctaw Co.*, Tuscahoma Ldg., Tombigbee R.

Types.—Holotype, No. 1434 USNM; paratypes, No. 137224 USNM, No. 156 PRI

Venericarida aragonia Arnold and Hannibal, Rutsch, 1936a in part
See *Venericardia* (*Leuroactis*) *horatiana* Gardner

Venericardia* (*Venericor*) *ascia* Rogers and Rogers **Carditidae*

Venericardia ascia Rogers and Rogers, 1839b, p. 374, pl. 29, fig. 2 (3 figs.) (reprint, 1884, p. 671, pl. 4, fig. 2 [3 figs.]); H. C. Lea, 1849, p. 107; Conrad, 1865a, p. 7; not Heilprin, 1891a, p. 402; not Harris, 1896, p. 58; Clark, 1896, p. 80; Clark and Martin, 1901, p. 177; Dall, 1903a, pp. 1419, 1422 in part; Woods, 1922, p. 69; Stewart, 1930, p. 163; Rutsch, 1936a, p. 164

Venericardia marylandica Clark and Martin, 1901, p. 179, pl. 40, figs. 7, 7a; Dall, 1903a, pp. 1419, 1423; Waring, 1917, p. 54; Woods, 1922, p. 69; Stewart, 1930, p. 151. *Fide* Gardner and Bowles, 1939

Venericardia (Venericor) ascia Rogers and Rogers, Gardner and Bowles, 1939, p. 171, pl. 35, figs. 3, 5 type *V. marylandica* Clark and Martin, figs. 4, 6, 7 type *V. ascia*

Not *Venericardia planicosta* form *a* Harris, 1897b, p. 54 as in Dall, 1903a, p. 1423 = Ala.

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: King George Co., "near the Potomac", (type); Woodstock; (Co. unknown), Pamunkey R. MD.: Charles Co., 1 mi. below Popes Cr.; 2 and 2½ mi. above Popes Cr.

Types.—*V. ascia*, holotype, No. 12986 BSNH *vide* Cushman, 1907 possibly now MCZ; No. 12507 ANSP *vide* Stewart 1930. *V. marylandica* Clark and Martin, holotype USNM

Venericardia (Venericor) bashiplata Gardner and Bowles **Carditidae**

Venericardia planicosta (of authors), Harris, 1897b, p. 55 in part, pl. 9, fig. 3; pl. 10, fig. 5; Brann and Kent, 1960, p. 960, Nos. 133, 157 only ["var." ♂]

Venericardia planicosta var. 5 [error for ♂] Harris, Waring, 1917, p. 54

Venericardia planicosta (of authors), Stewart, 1930, pp. 156, 161

Venericardia (Venericor) bashiplata Gardner and Bowles, 1939, p. 171, pl. 33, fig. 9; pl. 34, figs. 3-6; Barry, 1942+, p. 62, pl. 8, fig. 1; Wasem and Wilbert, 1943, p. 188, pl. 31, fig. 9

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Beaver Cr., ¼ mi. E. of Choctaw Corners (type); Woods Bluff, Tombigbee R.

For additional localities in ALA., MISS., and TEXAS see Gardner and Bowles, 1939, p. 171, and Barry, 1942+, p. 63

Types.—Syntypes, No. 371914 USNM

Venericardia (?) bilineata (Conrad) **Carditidae**

Cardita bilineata Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 9; H. C. Lea, 1849, p. 97; Conrad in Wailes, 1854, p. 287 (reprint 1939, p. 10); Harris, 1919, p. 86

Venericardia bilineata (Conrad), Conrad, 1865a, p. 7; "?" Conrad, 1866a, p. 5; Dall, 1903a, p. 1424; Harris, 1919, p. 86, pl. 31, fig. 8 copy Conrad

Cardita bilineata Conrad (not Tuomey), Tuomey, 1848, p. 153

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Types.—Missing, ANSP Moore, 1962, p. 42

Venericardia (cf. Claibornicardia) blandingi Conrad **Carditidae**

Venericardia blandingi Conrad, 1830, p. 229, pl. 9, fig. 20; Tuomey, 1848, p. 153; Bronn, 1848b, p. 1350; H. C. Lea, 1849, p. 107; Bronn, 1849, p. 298; Conrad, 1865a, p. 7; Conrad, 1866a, p. 5; Dall, 1903a, p. 1424; Harris, 1919, p. 86, pl. 31, figs. 11, 11a copies Conrad, 1830; Stenzel, Krause and Twining, 1957, p. 129

Not *Cardita Blandingi* (Conrad) Heilprin, 1891a, p. 402

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr.

Locality.—S. C.: Orangeburg Co., Vance's Ferry, Santee R. (type) (see Stenzel, Krause, and Twining, 1957, p. 129)

Types.—? Syntypes, No. 30500 ANSP Moore, 1962, p. 43 "Conrad, may have had one specimen"

Venericardia (?) brittoni (Whitfield)**Carditidae**

Cardita brittoni Whitfield, 1885, p. 233, pl. 30, figs. 11, 12; Whitfield, 1899, p. 155 type locality designated

Venericardia Brittoni (Whitfield), Dall, 1903a, p. 1424

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Localities.—N. J.: *Monmouth Co.*, Shark R.; Squankum (type)

Type.—Holotype, AMNH

Venericardia (Baluchicardia) bulla Dall**Carditidae**

Venericardia bulla Dall, 1903a, p. 1424, pl. 56, figs. 13, 14; Schuchert, *et al.*, 1905, p. 689; F. B. Plummer, 1933, pp. 811, 812, pl. 8, figs. 2a, 2b; Rutsch, 1936b, pp. 197, 198; Rutsch, 1943, p. 156

Venericardia (Glyptoactis ?) bulla Dall, Gardner, 1935, pp. 157, 163, pl. 13, figs. 1-4; pl. 14, figs. 4, 5 copy Dall, syntypes, fig. 6

Venericardia (Baluchicardia) bulla Dall, Stenzel, Krause, and Twinning, 1957, p. 107

Range.—Paleocene. Wills Point fm., upper Midway gr. (type); Naheola fm., upper Midway gr.

Localities.—TEXAS: "Brown sandstone of the Midway horizon, east of the first small creek on the road to Bastrop, Texas, from Old Garfield in the Austin quadrangle" Dall, 1903a, (type); *Bastrop Co.*, N. branch Wilbarger Cr., $\frac{1}{2}$ mi. below Travis-Bastrop Co. line; Dry Cr., $7\frac{1}{2}$ mi. SW. of Elgin; Colorado R., 2 mi. below Travis-Bastrop Co. line; Colorado R., 5 mi. below Webberville, Bur. Ec. Geol. sta. 3 mi. above Cedar Cr. bridge on Austin-Red Rock rd.

Type.—Holotype, No. 164556 USNM

Venericardia (?) carolinensis (Conrad)**Carditidae**

Cardita carolinensis Conrad, 1848a, p. 297; Conrad, 1848b, p. 128; Dall, 1903a, p. 1424; Harris, 1919, pp. 77, 85

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S. C.: *Calhoun Co.*, "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing, ANSP Moore, 1962, p. 44

Venericardia (Venericor) claiboplata Gardner and Bowles**Carditidae**

Probably *Cardita planicosta* Dana, 1863, fig. 801

Venericardia planicosta Dana, 1895, p. 897, fig. 1481 same as 1863

Cardita (Venericardia) planicosta Lamarck, de Gregorio, 1890, p. 214, in part, pl. 32, figs. 6-9, not fig. 10 (= *V. regia* Conrad)

Venericardia planicosta Lamarck, Harris, 1919, p. 77, in part, form δ [delta], pl. 27, figs. 5, 6; pl. 28, figs. 1, 2; Brann and Kent, 1960, p. 960 in part, Nos. 635, 636, 638, 639 only. Not Lamarck, 1801, p. 123

Venericardia claiboplata Gardner and Bowles, Cooke, 1936, pp. 61-64 *nomen nudum*

Venericardia (Venericor) claiboplata Gardner and Bowles, 1939, p. 173, pl. 36, figs. 1-4

Venericardia (Venericor) planicosta Lamarck var. *claiboplata* Gardner and Bowles, Shimer and Shrock, 1944, p. 419, pl. 167, fig. 22 copy Gardner and Bowles

Range.—Middle Eocene. Recklaw fm., lower Claiborne gr.; Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (USNM 11365 "cotype"); *Clarke Co.*, Clarksville (USNM 1434 "cotype") (type). For additional localities and formations in ALA., LA., S.C., and TEXAS see Gardner and Bowles, 1939, p. 173

Types.—Syntypes, Nos. 11365, 1434 USNM (Gardner and Bowles "cotypes"). Lectotype herein designated, No. 1434 USNM

Gardner and Bowles indicated two localities of different age as "cotypes". Because such a designation is not satisfactory we herein designate, No. 1434 USNM as lectotype thereby making Clarksville, Clarke Co., Ala. the type locality.

Venericardia (Venericor ?) claviger Gardner and Bowles **Carditidae**

Venericardia claviger Gardner and Bowles, Cooke, 1936, p. 58 *nomen nudum*

Venericardia (Venericor ?) claviger Gardner and Bowles, 1939, p. 176, pl. 38, figs. 1, 2

Range.—Middle Eocene. Claiborne gr. undifferentiated (type)

Localities.—ALA.: *Clarke Co.*, Selma and Mobile R.R. cut near Jackson USGS sta. 2666 (type). S. C.: *Aiken Co.*, Kennedy's scarp, $\frac{1}{2}$ mi. W. of Cox's Bridge, S. side of Tinker's Cr.

Type.—Holotype, No. 136973 USNM

Venericardia (Claibornicardia) complexicosta Meyer and Aldrich

Carditidae

Venericardia complexicosta Meyer and Aldrich, 1886, p. 45, pl. 2, figs. 21, 21a; not Harris, 1896, p. 58 under *V. planicosta*; Dall, 1903a, pp. 1424, 1429; Harris, 1919, p. 84, pl. 31, fig. 5 copy type [as "Aldrich and Meyer"]

Venericardia (Claibornicardia) complexicosta Meyer and Aldrich, Stenzel, Krause, and Twining, 1957, p. 111, pl. 15, figs. 1-4

Range.—Middle Eocene. Archusa marl mem., Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: *Clarke Co.*, Wautubbee (type) = R.R. cut about 1 mi. N. of depot at Wautubbee or about 0.4 mi. N. of overpass of U. S. Highway 11 (Laurel-Meridan rd.) over Southern R.R., NW., Clarke Co. (*vide* Stenzel, Krause, and Twining, 1957, p. 113); *Newton Co.*, Decatur (Bur. Ec. Geol. loc. No. Miss. 51). LA.: *Bienville Par.*, Mt. Lebanon. TEXAS: for Texas localities see Stenzel, Krause, and Twining, 1957, p. 114

Type.—Holotype not USNM, 1962

Venericardia (Venericor) cookei Gardner and Bowles

Carditidae

Venericardia (Venericor) cookei Gardner and Bowles, 1939, p. 176, pl. 38, figs. 5, 6

Range.—Upper Eocene. "Jackson gr." (type) (Gardner and Bowles, 1939); [Middle Eocene. Tallahatta fm., lower Claiborne gr., (Stenzel, Krause, and Twining, 1957, p. 68)]

Locality.—ALA.: *Covington Co.*, Caton's Bluff, Conecuh R. (type)

Type.—Holotype, No. 129767 USNM

Venericardia (Glyptoactis ?) crenaea Gardner**Carditidae***Venericardia (Glyptoactis) crenaea* Gardner, 1935, pp. 157, 167, pl. 15, figs. 1, 2*Range*.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.*Localities*.—TEXAS: *Medina Co.*, bed of Hondo R., 1 mi. NW. of New Fountain (type); 1 mi. E. of Church at Quihi; $3\frac{1}{4}$ mi. N. 25° W. of Dunlay; Verde Cr., $4\frac{1}{2}$ mi. NE. of Hondo, $1\frac{3}{4}$ mi. NW. of New Fountain; D'Hanis-Yancey rd., $7\frac{1}{2}$ mi. SE. of D'Hanis; *Uvalde Co.*, 11 mi. S. of Sanibal, a few hundred yards S. of junction of Elm Cr. with Sanibal Cr.; $\frac{1}{2}$ mi. below Bob Evans' (Myrick's) apiary*Types*.—Syntypes, No. 370911 USNM**Venericardia (Venericor) densata** (Conrad)**Carditidae***Cardita densata* Conrad, 1845b, p. 173; Conrad, 1848b, p. 130, pl. 14, fig. 24; H. C. Lea, 1849, p. 97; Tuomey, 1858, p. 264; Dall, 1903a, pp. 1421-1423*Venericardia densata* (Conrad), Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; not Harris, 1896, p. 58; Dall, 1903a, p. 1421-1423; Stewart, 1930, p. 157; Chavan, 1936a, p. 116 in part; Chavan, 1936b, p. 167*Cardita (Venericardia) densata* Conrad, de Gregorio, 1890, p. 214, pl. 32, fig. 11 copy Conrad*Venericardia planicosta* var. "*densata*" (Conrad), Harris, 1919, p. 77, pl. 27, figs. 1, 1a, 2, 3; Brann and Kent, 1960, p. 962*Venericardia (Venericor) densata* (Conrad), Gardner and Bowles, 1939, p. 189, pl. 37, fig. 7; pl. 45, figs. 1-11, 14; Gardner, 1945, p. 36*Venericardia planicosta* var. *densata* (Conrad), Harris and Palmer, 1946, p. 65*Venericardia (Venericor) planicosta densata* (Conrad), Stenzel, Krause, and Twining, 1957, p. 103, pl. 8, fig. 10; pl. 11, figs. 1-4, 13, 14; Perrilliat Montoya, 1963, p. 7, pl. 4, fig. 3Not *Venericardia (Venericor) planicosta* cf. *densata* (Conrad), Wilbert, 1953, p. 123 = *Venericardia* sp.

For complete synonymy see Gardner and Bowles, 1939, p. 189

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr. see Gardner and Bowles, 1939 for complete range*Locality*.—ALA.: *Monroe Co.*, [base of] Claiborne Bluff, Alabama R. (type). For additional localities see Gardner and Bowles.*Type*.—Probable holotype, No. 30639 ANSP Moore, 1962, p. 53*Venericardia densata mooreana* ConradSee *Venericardia (Venericor) mooreana* Conrad**Venericardia (Venericor) densata pendletonensis** Gardner and Bowles**Carditidae***Venericardia planicosta* Lamarck, Harris, 1899b, p. 302 in part, pl. 53, fig. 6. Not Lamarck, 1801, p. 123*Venericardia (Venericor) densata pendletonensis* Gardner and Bowles, 1939, p. 188, pl. 45, figs. 12, 13; Barry, 1942+, p. 60, pl. 7, figs. 10, 11; Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 8

Range.—Lower Eocene. Marthaville fm., lower Wilcox [Sabine] gr.; Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

Localities.—TEXAS; Sabine Co., Pendleton Bluff, ¼ mi. above Pendleton Ferry, Sabine R. (type). For further localities in Natchitoches Par., Sabine Par., LA., and Sabine Co., TEXAS, see Barry, 1942+, p. 61

Type.—Holotype, No. 372694 USNM

Venericardia diversidentata Meyer

Carditidae

Venericardia diversidentata Meyer, 1885a, pp. 460, 467; Casey, 1903, p. 264; Gardner, 1945, p. 93 in part; Harris and Palmer, 1946, p. 69, pl. 16, fig. 10 type; pl. 17, figs. 1-3, 5-6; Brann and Kent, 1960, pp. 953, 954

Venericardia sp. cf. *V. diversidentata* Meyer, Gardner, 1945, p. 93 in part

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: Hinds Co., Jackson (type); Town Cr., Jackson. LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

Type.—Holotype, No. 74 GSATC

Venericardia diversidentata Meyer "var."

Carditidae

Venericardia diversidentata Meyer "var.", Harris and Palmer, 1946, p. 69, pl. 17, figs. 7-11; Brann and Kent, 1960, p. 954

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Localities.—MISS.: Hinds Co., Moodys Branch, Jackson. LA.: Grant Par., Montgomery Ldg., Red R.

Types.—Figured specimens, Nos. 4274-4279 PRI

Venericardia diversidentata garlandia Harris, 1946; Brann and Kent, 1960 *nomen nudum*

See *Venericardia diversidentata symmetrica* Dall

Venericardia diversidentata praecisa Dall

See *Venericardia praecisa* Dall

Venericardia diversidentata symmetrica Dall

Carditidae

Venericardia (Pleuromeris) parva symmetrica Dall, 1903a, p. 1432

Venericardia diversidentata symmetrica Dall, Harris and Palmer, 1946, p. 71, pl. 17, figs. 15, 16, 16a, 17, 17a [on pl. as var. *garlandia* = *nomen nudum*]; Brann and Kent, 1960, p. 955

Range.—Middle Eocene. Gosport sd., (syntype), uppermost Claiborne gr. Upper Eocene. White Bluff fm. (syntype), lower Jackson gr.

Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (syntype). ARK.: Drew Co., Cornish Ferry, Saline R. (syntype)

The syntypes of this species should be examined critically to verify if they belong to the same subspecies. If not one should be designated a lectotype to establish the type locality and formation.

Types.—Syntypes, Nos. 164613 (Ark.); 164614 (Ala.) USNM

Venericardia (Glyptoactis) eoa Gardner**Carditidae**

Venericardia eoa Gardner ms., F. B. Plummer, 1933, pp. 811, 812, pl. 8, fig. 1

Venericardia (Glyptoactis) eoa Gardner, 1935, p. 170, pl. 15, figs. 3-5

Range.—Paleocene. Kincaid fm. (type), lower Midway gr. [below the *Venericardia bulla* zone]

Localities.—TEXAS; *Bastrop Co.*, S. bank of Colorado R., 1½ mi. below the Travis-Bastrop Co. line (type); 4-5 mi. below Webberville, Colorado R.

Types.—Holotype and paratype, No. 370918 USNM

Venericardia (?) eutawcolens Harris**Carditidae**

Venericardia eutawcolens Harris in Van Winkle and Harris, 1919, p. 13, pl. 2, figs. 1, 2; Brann and Kent, 1960, pp. 955, 956

Range.—Middle Eocene. Santee ls. (type), upper Claiborne gr. *vide* Cooke and Mac Neil, 1952, p. 20

Localities.—S.C.; *Orangeburg Co.*, Eutaw Springs (type); [*? Co.*], Center Hill

Types.—Syntypes, Nos. 1401, 1402, PRI

Venericardia flabellum Harris

See *Venericardia rotunda flabellum* Harris

Venericardia flabellum kingi Plummer

See *Venericardia rotunda kingi* Plummer

Venericardia (Venericor) francescae Gardner and Bowles**Carditidae**

Venericardia (Venericor) francescae Gardner and Bowles, 1939, p. 183, pl. 46, figs. 6, 7

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Locality.—MISS.: *Union Co.*, St. Louis-San Francisco R.R. cut, 1-1½ mi. SE. of New Albany (type)

Type.—Holotype, No. 372925 USNM

Venericardia (Venericor) gardnerae Barry**Carditidae**

Venericardia (Venericor) gardnerae Barry, 1942+, p. 59, pl. 7, figs. 1-3

Range.—Paleocene. "Logansport fm." (name preoccupied) (type), middle Midway gr.

Locality.—LA.: *Natchitoches Par.*, E. of bridge over Rock Cr. on dirt rd. leading W. from La. Highway 404 (type). For additional localities see Barry, 1942+, p. 60

Types.—Holotype, No. 5012; paratype, No. 5013 LSU Pal. Mus.

Venericardia (Venericor ?) greggiana Dall**Carditidae**

Venericardia alticostata var. Harris, 1897b, p. 55, pl. 11, fig. 1; Brann and Kent, 1960, p. 951, No. 137 only

Cardita decusata [sic] Tuomey, 1858, p. 271 *nomen nudum* not "Lamarck, 1807" as in Dall, 1903a, Lamarck's name was *Venericardia decussata* Lam., 1806, p. 59 not *Cardita*. Not *C. decussata* (Lam.) Nyst, 1845, p. 216 or G. V. Muenster, 1834, p. 9

Venericardia greggiana Dall, 1903a, p. 1425; Rutsch, 1943, p. 156

Venericardia (Venericor ?) greggiana Dall, Gardner and Bowles, 1939, p. 194, pl. 46, fig. 9 (copy Harris, "holotype"); Harris and Palmer, 1946, p. 68

Range.—Lower Eocene. Greggs Ldg. mem., Tuscahoma fm. (type), middle Wilcox [Sabine] gr.

Localities.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type); Bells Ldg., Alabama R.; Wilcox Co., Lower Peachtree Ldg., Alabama R.; Marengo Co., Nanafalia Ldg., Tombigbee R.

This species was not figured by Dall or a type designated other than the locality "Lower bed at Gregg's Landing, Alabama", and the reference to Harris, 1897b (p. 55, pl. 11, fig. 1). Gardner and Bowles, 1939, considered the specimen of Harris' figure as the holotype. We herein designate the specimen (No. 137 PRI, Harris, 1897b, pl. 11, fig. 1; Brann and Kent, 1960, p. 951) as lectotype to satisfy technicalities of type definition.

Type.—Lectotype, No. 137 PRI

Venericardia (?) gulielmi Gardner and Bowles

Carditidae

Venericardia simplex Dall, 1903a, p. 1426, pl. 56, fig. 12; Schuchert, et al., 1905, p. 689; not *Cardita simplex* Wood, 1871, p. 151

Venericardia gulielmi Gardner and Bowles, 1939, p. 174, pl. 42, fig. 4

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 154725 USNM

Venericardia (Venericor) hatcheplata Gardner and Bowles

Carditidae

Venericardia planicosta Lamarck, Aldrich, 1886, p. 50 (listed only); Cooke, 1926a, pl. 94, fig. 7, (not Nanafalia but Hatchetigbee fide Gardner and Bowles). Not Lamarck, 1801, p. 123

Venericardia planicosta form ♂ Harris, 1897b, p. 55 in part; Dall, 1903a, p. 1422 in part; Stewart, 1930, p. 156 in part

Venericardia planicosta var. *laticardo* Wood, Dall, 1903a, p. 1422; not Wood, 1871, p. 150, pl. 21, fig. 5d

Venericardia (Venericor) hatcheplata Gardner and Bowles, 1939, p. 172, pl. 33, figs. 8, 12; pl. 34, figs. 1, 2; Perrilliat Montoya, 1963, p. 8, pl. 12, figs. 1, 5

Range.—Lower Eocene. Hatchetigbee fm. (type), upper Wilcox [Sabine] gr.

Localities.—ALA.: Washington Co., Hatchetigbee Bluff, Tombigbee R., sta. USGS 261 (type); roadside ½ mi. W. of Butler, GA.; Stewart Co., 1¼ mi. NE. of Troutman, spring W. of Georgia, Florida, and Alabama, R.R.

Types.—Syntypes, No. 372173 USNM

Venericardia (?) hesperia Gardner

Carditidae

Venericardia alticostata Conrad var., Harris, 1896, p. 57 in part. Not *Cardita alticostata* Conrad, 1833a, p. 342

Venericardia alticostata subsp. *hesperia* Gardner, 1923, p. 112, pl. 32, figs. 1, 2 not indicated in text

Venericardia hesperia Gardner, Trowbridge, 1932, pl. 31, figs. 1, 2 copy Gardner type; F. B. Plummer, 1933, pp. 547, 550; Stenzel, Krause, and Twining, 1957, p. 106 subgenus ?

Venericardia (Glyptoactis) hesperia Gardner, Gardner, 1935, pp. 157, 164; Gardner and Bowles, 1939, pp. 147, 148, 161, 195, pl. 46, figs. 4, 5

? *Venericardia hesperia* Gardner, Gardner, 1935, p. 165, pl. 15, fig. 6

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Localities.—TEXAS: *Uvalde Co.*, bluff on Frio R. half mile below Myrick's (Evans's) apiary (type); Frio R. just above water-hole opposite apiary below Englemann's ranch; 11 mi. S. of Sabinal; *Medina Co.*, 1¼ mi. NW. of New Fountain; *Maverick Co.*, 18 mi. SE. of Eagle Pass; Bibora Cr., just below Bibora tank about 18 mi. SE. of Eagle Pass; White Bluff on Rio Grande on land of Indio Cattle Co. about 4½ mi. W. of S. of Jacal house in SE. Maverick Co. For additional localities see Gardner and Gardner and Bowles.

Type.—Holotype, No. 352268 USNM

Venericardia (Venericor) hijuana Gardner and Bowles **Carditidae**

Cardita subquadrata Gabb, 1860d, p. 395; not Gabb, 1860a, p. 303; Meek, 1864, p. 11; Harris, 1896, p. 60. Not Conrad, 1848a, p. 298; not Conrad, 1848b, p. 128

Venericardia planicosta var. *smithi* Harris, 1896, p. 60 in part, not *V. smithi* Aldrich, 1894b

Venericardia (Venericor) hijuana Gardner and Bowles, 1939, p. 184, pl. 42, figs. 1, 6-10

Venericardia (Pacifcor) hijuana Gardner and Bowles, Verastegui, 1953, pp. 15, 25

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Localities.—TENN.: *Hardeman Co.*, milepost 481, E. of Middleton USGS station 6091; cut on Southern R.R., 1½ mi. E. of Middleton and 200 ft. E. of milepost 481, USGS station 6495 (type localities)

Types.—Syntypes, Nos. 372919, 372920 USNM

Venericardia (Leuroactis) horatiana Gardner **Carditidae**

Venericardia planicosta form γ Harris, 1897b, p. 55 in part, pl. 10, figs. 1-4; Dall, 1903a, p. 1422 in part; Olsson, 1928, p. 27 in part; Harris, 1919, p. 77 in part, not pl. 28, fig. 3; pl. 29 fig. 1; Brann and Kent, 1960, pp. 959, 960, Nos. 130, 131, 132, 134

Venericardia hornii Gabb, Dall, 1903a, p. 1422 in part not *Cardita hornii* Gabb, 1864, pp. 174, 232, pl. 24, fig. 157

Venericardia planicosta Lamarck, Waring, 1917, p. 54 in part. Not Lamarck, 1801, p. 123

Venericardia horatiana Gardner, 1927, p. 369, figs. 28, 29; Stewart, 1930, p. 160, pl. 9, figs. 1-3; pl. 10, fig. 3; Rutsch, 1936a, pp. 163, 171, 174; Chavan, 1936a, p. 117

Venericardia aragonia Arnold and Hannibal, Rutsch, 1936a, pp. 163, 164, 168, 170, 171, 174, 177, 180. Not Arnold and Hannibal, 1914, p. 907

Venericardia (Venericor) horatiana Gardner, Gardner and Bowles, 1939, p. 177, pl. 39, figs. 1-3, 5; pl. 40, figs. 1, 2, 5; Barry, 1942+, p. 63, pl. 8, fig. 7

Venericardia (Leuroactis) horatiana Gardner, Verastegui, 1953, pp. 15, 16, 48, 59

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm. (type), upper Wilcox [Sabine] gr.

Localities.—TEXAS: *Sabine Co.*, 1½ mi. W. of Sabinetown (type); Sabinetown Bluff, 300 feet to ¼ mi. below Sabinetown Ferry, Sabine R. ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee R.; *Coffee Co.*, Pea R. at Churchwell's Bridge, about

5½ mi. S. of Elba; power plant Pea R., 4 mi. below Elba; Clarke Co., 1.6 mi. S. of Bashi; about 3 mi. W. of Choctaw Corners, near Thomasville; Woods Bluff, Tombigbee R. See Gardner and Bowles, 1939, for complete localities.

Type.—Holotype, No. 369238 USNM

Venericardia horatiana Gardner, Stewart, 1930, in part. Not Gardner, 1927

See also *Venericardia stewarti* Gardner and Bowles

Venericardia hornii Dall, 1903a in part, not Gabb, 1864

See *Venericardia (Venericor) horatiana* Gardner

Venericardia hornii Gabb, Harris, 1896, not Gabb, 1864

See under *Venericardia (Venericor) mediaplata* Gardner and Bowles

Venericardia (Pleuromeris) inflator Meyer

Carditidae

Venericardia inflator Meyer, 1885a, p. 460; Meyer, 1886b, p. 84, pl. 1, fig. 26; Harris, 1919, p. 87, pl. 31, fig. 6 copy Meyer; Harris and Palmer, 1946, p. 75 in part, not pl. 17, figs. 18, 18a, 18b (= *V. inflator* var. *jacksonensis*)

Cardita (Venericardia) inflator Meyer, de Gregorio, 1890, p. 215, pl. 32, fig. 12 copy Meyer

Cardita inflator (Meyer), Cossmann, 1893, p. 14 in part under *parva* *Venericardia* (? *Cyclocardia*) *inflator* Meyer, Dall, 1903a, p. 1432

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype not USNM, 1962

Venericardia inflator jacksonensis Meyer

Carditidae

Venericardia inflator var. *Jacksonensis* Meyer, 1885a, p. 460. Not *Venericardia Jacksonensis* Conrad, 1866a *nomen nudum*; not *Venericardia parva* var. *Jacksonensis* Meyer, 1885a, p. 460

Venericardia (Pleuromeris) inflator Meyer, Harris and Palmer, 1946, p. 75 in part, pl. 17, figs. 18-18b (18b type); Brann and Kent, 1960, p. 957

Range.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson (type); Clarke Co., Garland Cr.

Type.—Holotype, No. 77 GSATC

The name *Venericardia jacksonensis* is badly confused. The *V. jacksonensis* Conrad, 1866a, is a *nomen nudum*. *V. jacksonensis* Meyer, 1885a, was used twice on the same page, first as a "variety" of *V. parva* Lea and second as "variety" of *V. inflator* Meyer. Neither form was adequately described nor figured by Meyer. Both names would have been better dropped because one preoccupied the other. Only one *V. jacksonensis* Meyer can be valid. Harris (1946) figured the holotype of *V. inflator jacksonensis* Meyer under *V. inflator* Meyer. We, therefore, retain the name *jacksonensis* for that form because it has better identification as yet. If the variation or subspecies of *V. parva* designated as *jacksonensis* deserves a name, a new one for it is required. We have listed it herein as *V. (Pleuromeris) sp.*, which see.

Venericardia intermedia (Whitfield)**Carditidae**

Cardita intermedia Whitfield, 1885, p. 209, pl. 28, figs. 14, 15; Whitfield, 1899, p. 155; Weller, 1907, p. 565, pl. 62, figs. 6, 7 type; fig. 8

Range.—Lower Eocene. ? Vincentown fm.; Manasquan fm. (type)

Localities.—N.J.; Monmouth Co., Farmingdale (type); ? near Deal

Type.—Holotype, Columbia Univ. Coll., No. 19603 AMNH

Venericardia Jacksonensis Conrad, 1866a, p. 23 *nomen nudum*. Not *V. parva* var. *Jacksonensis* Meyer, 1885a, p. 460 or *V. inflator* var. *Jacksonensis* Meyer, 1885a, p. 460; not *V. jacksonensis* (Conrad), Harris, 1894b, p. 149; not Vaughan, 1896, p. 51

V. jacksonensis Conrad, Dall, 1903a, p. 1424 *nomen nudum*; Harris and Palmer, 1946, p. 69 *nomen nudum*

Venericardia (Venericor) jewelli Gardner**Carditidae**

Venericardia (Venericor) jewelli Gardner, 1935, p. 158, pl. 12, figs. 1, 2; Gardner and Bowles, 1939, p. 184, pl. 42, figs. 2, 3

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Maverick Co.*, Comanche Cr. crossing on W. road to Farias near Indio Wells tank, about 29 mi. SE. of Eagle Pass (type); Bibora tank, 7 mi. E. of new Indio ranch house; 3 mi. N. of Media tank

Types.—Syntypes, No. 370914 USNM

Venericardia (Venericor) klimacodes Gardner and Bowles**Carditidae**

Venericardia (Venericor) klimacodes Gardner and Bowles, 1939, p. 193, pl. 37, figs. 9, 10

Venericardia (Venericor) cf. *klimacodes* Gardner and Bowles, Harbison, 1944, p. 4 (holotype not ANSP), pl. 2 fig. 8

Venericardia planicosta var. *klimacodes* Gardner and Bowles, Harris and Palmer, 1946, p. 67, pl. 16, figs. 7, 8; Brann and Kent, 1960, p. 962

Range.—Middle Eocene. Santee ls., upper Claiborne gr. Upper Eocene. Yazoo cl. (type), upper Jackson gr.

Localities.—MISS.: *Yazoo Co.*, large ravine, 1 mi. S. of Yazoo City, along street car line about ¼ mi. N. of tile plant and just below old reservoir (type). S.C.: *Berkeley Co.*, Santee-Cooper Canal, 17 mi. NW. of Moncks Corner

Type.—Holotype, No. 372693 USNM

Venericardia (Pleuromeris) leonensis Gardner**Carditidae**

Venericardia (Pleuromeris) leonensis Gardner, 1927, p. 371, figs. 38, 39; Harris and Palmer, 1946, p. 74, pl. 17, figs. 22, 23 copy Gardner

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—TEXAS: *Leon Co.*, 8 mi. S. of Jewett (type)

Type.—Holotype, No. 369247 USNM

Venericardia (Pleuromeris) ludvia Harris

Venericardia (Pleuromeris) ludvia Harris in Harris and Palmer, 1946, p. 74

Range.—Upper Eocene. Jackson gr. (probably) (type)

Locality.—TEXAS: "Sabine R." (type)

This binomen should be regarded as a *nomen nudum*. It had no description, was not figured, and the type is lost.

Type.—Holotype, Harris Coll. PRI. Not figured, not found.

Venericardia marylandica Clark and Martin

See *Venericardia* (*Venericor*) *ascia* Rogers and Rogers

Venericardia* (*Venericor*) *mediaplata* Gardner and Bowles **Carditidae*

Venericardia planicosta Lamarck, Aldrich, 1894b, p. 242, pl. 12, fig. 3; Harris, 1896, p. 58 in part, pl. 4, fig. 13; Grabau and Shimer, 1909, p. 545, fig. 747 (left valve); Waring, 1917, p. 54. Not Lamarck, 1801, p. 123

Not *Cardita hornii* Gabb, Harris, 1896, p. 58=Calif.

Venericardia mooreana Conrad, Dall, 1903a, p. 1422; not Conrad, 1867c, p. 190

Venericardia mediaplata Gardner and Bowles, 1939, p. 168, pl. 33, figs. 1, 3; Verastegui, 1953, pp. 15, 48

Range.—Paleocene. Clayton fm. (type), lower Midway gr. (Ala., Miss.); Porters Cr. fm., upper Midway gr. (Tenn.); undifferentiated (Ga.), Midway gr.

Localities.—ALA.: *Wilcox Co.*, Prairie Cr. (type), MISS.: *Tippah Co.*, Bluff on S. side of Owl Cr., 2¾ mi. NE. of Ripley and about ¼ mi. E. of the Ripley-Troy rd. near base of formation. TENN.: *Hardeman Co.*, Porters Cr. TEXAS: *Limestone Co.*, near Horn Hill; *Maverick Co.*, White Bluff, Rio Grande R., 4 ½ mi. W. of S. of Windmill (Jacal) ranch house, GA.: *Houston Co.*, Robert Sappy's place, 4 mi. E. of Marshallville, on E. side of a branch of Spring Cr., in a ravine below negro cabins; *Clay Co.*, Fort Gaines, Chattahoochee R. limestone at base of the bluff

Type.—Holotype, No. 137241 USNM

Venericardia* (*Venericor* ?) *mingoensis* Gardner and Bowles **Carditidae*

Venericardia mingoensis Gardner and Bowles, Cooke, 1936, p. 44 *nomen nudum*

? *Venericardia* "*planicosta*" Cooke, 1936, pp. 43, 47, 49-51

Venericardia (*Venericor* ?) *mingoensis* Gardner and Bowles, 1939, p. 194, pl. 46, figs. 2, 3

Range.—Paleocene. Probably lower Midway, undifferentiated (type)

Localities.—S.C.: *Georgetown Co.*, Black R., Rhems field, 1 mi. W. of Steamboat Ldg. (type); Black R., 12 mi. NW. of Georgetown

Type.—Holotype, No. 372922 USNM

Venericardia* (*Glyptoactis* ?) *moa* Gardner **Carditidae*

Venericardia sp. nov. Harris, 1894b, p. 34, pl. 1, fig. 7

Venericardia ulticostata Con. var. Harris, 1896, p. 57 in part, pl. 5, fig. 3 copy Harris, 1894b USGS sta. 583, collector C. A. White, 1887

Venericardia (*Glyptoactis* ?) *moa* Gardner, 1935, pp. 157, 168, pl. 10, fig. 1; Gardner and Bowles, 1939, p. 195, pl. 46, fig. 1

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Maverick Co.*, Bibora Creek just below Bibora tank, about 18 mi. SE. of Eagle Pass (type); 3 mi. N. of Media tank; hillside above small tank, 2 mi. W. of Lopez tank,

about 29 mi. SE. of Eagle Pass; 1 mi. NW. of Indio Wells;
White Bluff on the Rio Grande, about 4½ mi. W. of S. of
Windmill (Jacal) ranch house
Type.—Holotype, No. 370922 USNM

Venericardia moa, "n. subsp. ?"**Carditidae**

Venericardia moa Gardner new subspecies ? Gardner, 1935, p. 169

Range.—Paleocene. Midway gr.

Localities.—TEXAS: See Gardner, 1935, pp. 169, 170 for various localities

Types.—Unfigured specimens, No. 370912 USNM

Venericardia monilicosta Gabb

Not Texas as in Conrad, 1865a, p. 8; Conrad, 1866a, p. 5 (= California)

Venericardia (Venericor) mooreana Conrad**Carditidae**

Venericardia mooreana Conrad, 1867c, p. 190; Heilprin, 1891a, p. 402 ?; not Harris, 1896, p. 58 (in *V. planicosta* synonymy) = (*V. mediaplata* Gardner and Bowles); not Dall, 1903a, p. 1422 in part (= *V. mediaplata*); Stenzel, Krause, and Twining, 1957, pp. 104, 112, 113, pl. 11, fig. 4

Venericardia densata mooreana Conrad, Harris, 1919, p. 77, pl. 27, fig. 4; Brann and Kent, 1960, p. 962

Range.—Middle Eocene. Presumably Stone City beds (type), middle Claiborne gr. (see Stenzel, Krause, and Twining, 1957, p. 104)

Locality.—"TEXAS": Conrad [Wheelock], presumably Stone City Bluff, Brazos R. (type), *fide* Stenzel, Krause, and Twining, 1957, p. 104

Types.—Possible syntypes (2), No. 13243 ANSP Moore, 1962, p. 78

Venericardia mooreana Dall, 1903a, p. 1422 in part. Not Conrad, 1867c
See *Venericardia (Venericor) mediaplata* Gardner and Bowles

Venericardia (Venericor) nanaplata Gardner and Bowles**Carditidae**

Venericardia (Venericor) nanaplata Gardner and Bowles, 1939, p. 169, pl. 33, figs. 2, 7

Venericardia planicosta Lamarck, Cooke 1926a, pl. 94, fig. 7; Semmes, 1929, fig. 59-7 not Lamarck, 1801, p. 123

Range.—Lower Eocene. Nanafalia fm. (type), lower Wilcox [Sabine] gr.; Tuscahoma fm., middle Wilcox [Sabine] gr.

Localities.—ALA.: *Marengo Co.*, Nanafalia Bluff, Tombigbee R. (type); *Monroe Co.*, Greggs Ldg., Alabama R.

Type.—Holotype, No. 137226 USNM

Venericardia (Venericor) nanaplata nanna Gardner and Bowles **Carditidae**

Venericardia (Venericor) nanaplata nanna Gardner and Bowles, 1939, p. 169, pl. 33, figs. 4, 5, 10, 11

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: *Monroe Co.*, Greggs Ldg., Alabama R. (type)

Types.—Syntypes, No. 373028 USNM

Venericardia (cf. Claibornicola) nasuta Dall**Carditidae**

Venericardia nasuta Dall, 1903a, p. 1425, pl. 53, fig. 9; Schuchert, *et al.*, 1905, p. 689; ? Kellum, 1926, p. 23, pl. 3, fig. 3

Venericardia (Claibornicola) nasuta Dall, Stenzel, Krause, and Twin-ing, 1957, p. 106 presumably *Claibornicola*

Range.—Eocene. Dall stated labelled "Midway horizon" but considered this unlikely.

Locality.—ALA.: "Conecuh County . . . no exact locality assigned to the type specimen", Dall, 1903a, p. 1426

Type.—Holotype, No. 164626 USNM

Venericardia (?) natchitoches Harris**Carditidae**

Venericardia natchitoches Harris, 1919, p. 82, pl. 30, fig. 10, 13-16; F. B. Plummer, 1933, p. 811, pl. 8, figs. 6a, 6b; Verastegui, 1953, p. 43; Brann, and Kent, 1960, pp. 957, 958. Not p. 957, No. 663=*V. alticostata* Conrad

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: *Natchitoches Par.*, Natchitoches (type)

Types.—Syntypes, Nos. 661, 664-667 PRI

Venericardia cf. nodifera Kellum, Harris, 1951; not Kellum, 1926

See *Venericardia* spp.

Venericardia ocalaedes Harris**Carditidae**

Venericardia planicosta var. *ocalaedes* Harris, 1951, p. 16, pl. 7, fig. 8; Brann and Kent, 1960, p. 963

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—GA.: *Houston Co.*, Georgia Lime Rock quarry about 4 mi. from Perry

Type.—Holotype, 24475 PRI

Venericardia (Pleuromeris) parva LeaPl. 2, figs. 8, 9 **Carditidae**

Venericardia parva Lea, 1833, p. 70, pl. 2, fig. 49; Conrad App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Bronn, 1848a, p. 227; Bronn, 1848b, p. 1351; Bronn, 1849, p. 297; Tuomey, 1858, p. 268; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; not Harris, 1894b, p. 149="var."; Harris, 1895b, p. 33; Harris, 1919, p. 88, pl. 31, figs. 13-16; Harris and Palmer, 1946, p. 73; Brann and Kent, 1960, pp. 958, 959
Cardita parva (Lea), d'Orbigny, 1850, p. 384; Cossmann, 1893, p. 14 in part

Cardita (Venericardia) transversa var. *juvenis* de Gregorio, 1890, p. 213, pl. 31, figs. 14-22

Cardita (Venericardia) parva Lea, de Gregorio, 1890, p. 213, pl. 32, figs. 1-4, fig. 5 copy Lea

Venericardia (Pleuromeris) parva Lea, Dall, 1903a, p. 1432

The original illustration of Lea is a poor representation of the description of the species. Drawings of a type by Otto Meyer are included.

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.

Localities.—ALA.: *Monroe Co.*, base of and in Gosport sand (type) at Claiborne Bluff, Alabama R.

Types.—Probable syntypes, Nos. 5258, 5286 Lea Coll. ANSP

Venericardia parva Lea "var."**Carditidae***Venericardia parva* Lea, Harris, 1894b, p. 149*Venericardia parva* Lea "var." Vaughan, 1896, p. 51*Venericardia (Pleuromeris) parva* Lea "var." Harris and Palmer, 1946, p. 75, pl. 17, figs. 25, 26; Brann and Kent, 1960, p. 959*Range*.—Upper Eocene. Lower Jackson gr.*Localities*.—ARK.: Bradley Co., Cornish Ferry, Saline R.; Cleveland Co., Vince Ferry, Saline R.*Type*.—Figured specimen, No. 4289 PRI*Venericardia parva jacksonensis* MeyerSee *Venericardia (Pleuromeris)* sp.See also *Venericardia jacksonensis* Conrad, 1866a*Venericardia (Pleuromeris) parva symmetrica* DallSee *Venericardia diversidentata symmetrica* Dall**Venericardia (?) perantiqua** Conrad**Carditidae***Cardita subquadrata* Gabb, 1860a, p. 303, pl. 48, figs. 21 a, b [not figs. 22 a, b as in text]; not L. Lea, 1861, p. 150; not Conrad, 1848b, p. 128, pl. 14, fig. 9; not Meek, 1864, p. 11; not Gabb, 1860d, p. 395*Venericardia perantiqua* Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Conrad in Cook, 1867, p. 377, text fig.; Conrad, 1868, p. 731, not "Meek, 1868, p. 731" as in Whitfield, 1885, p. 232; Meyer and Aldrich, 1886, p. 45; Dall, 1903a, pp. 1422, 1423, not p. 1429; not *V. perantiqua* Conrad, Harris, 1896, p. 57; Harris, 1919, p. 85; Gardner 1923, p. 112*Cardita perantiqua* (Conrad), Whitfield, 1885, p. 232, pl. 30, figs. 8-10 [read in Whitfield, fig. 21 for pl. XXXI]; Scott, 1898, p. 504, pl. 11, fig. 3; Scott, 1907, pl. 16, fig. 3*Range*.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.*Localities*.—N.J.: Monmouth Co., Shark R.; near Monmouth; Farmingdale; Burlington Co. "green marl" Gabb, (type) *C. subquadrata*)*Types*.—Unknown, not listed in Moore; 1962*Venericardia perantiqua* Harris, 1896, not Conrad, 1865aSee *V. perantiqua* Conrad for Harris reference only.**Venericardia (Leuroactis) pilsbryi** Stewart**Carditidae***Venericardia pilsbryi* Stewart, 1930, p. 158, pl. 9, figs. 4, 5; pl. 10, figs. 1, 2 [Type species for section *Leuroactis*, Stewart, 1930]*Venericardia (Venericor) pilsbryi* Stewart, Gardner and Bowles, 1939, p. 175, pl. 38, figs. 9, 10*Venericardia (Leuroactis) pilsbryi* Stewart, Verastegui, 1953, p. 48*Range*.—Lower Eocene. Nanafalia fm., lower Wilcox [Sabine] gr.; Tuscahoma fm. (type), middle Wilcox [Sabine] gr.*Localities*.—ALA.: Wilcox Co., Yellow Bluff, Alabama R. (type), descent to Lower Peachtree Ferry, Alabama R.; Monroe Co., Greggs Ldg. (lower bed), Alabama R.; Bells Ldg., Alabama R.*Type*.—Holotype, No. 12510 ANSP*Venericardia planicosta* Lamarck, Aldrich, 1886 in part; Cooke, 1926a. Not *V. planicosta* Lamarck, 1801, p. 123See *Venericardia (Venericor) hatcheplata* Gardner and Bowles

Venericardia planicosta Lamarck, Aldrich, 1894b; Harris, 1896 in part; Grabau and Shimer, 1909 in part. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) mediaplata* Gardner and Bowles

Venericardia planicosta Lamarck, Brann and Kent, 1960, p. 960, No. 133, 157 only. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) bashiplata* Gardner and Bowles

Venericardia planicosta Lamarck, Brann and Kent, 1960, p. 960, Nos. 635, 636, 638, 639 only. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) claiobolata* Gardner and Bowles

Venericardia planicosta Lamarck, Brann and Kent, 1960, pp. 959, 960, Nos. 130, 131, 132, 134 only. Not Lamarck, 1801, p. 123
See *Venericardia (Leuroactis) horatiana* Gardner

Venericardia planicosta Lamarck, Clark, 1895 in part; Clark, 1896 in part. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) potapacoensis* Clark and Martin

Venericardia planicosta Lamarck, Conrad, 1830; Conrad, 1832a, Conrad, 1865a; Clark, 1895 in part; Clark, 1896 in part. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) regia* Conrad

? *Venericardia planicosta* Lamarck, Cooke, 1936. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor ?) mingoensis* Gardner

Venericardia planicosta Lamarck, Dana, 1863, fig. 801; 1895, p. 897, fig. 1481 same fig. as 1863. Not Lamarck, 1801, p. 123
Probably *V. claiobolata* Gardner and Bowles, 1939 which see

Venericardia planicosta Lamarck, Harris, 1894b, p. 42, in part. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) smithii* Aldrich

Venericardia planicosta Lamarck, Harris, 1897b in part; Waring, 1917 (as var. 5 error for δ) [δ]; Stewart, 1930. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) bashiplata* Gardner and Bowles

Venericardia planicosta Lamarck, Harris, 1897b, p. 42. Not Lamarck, 1801, p. 123
See *Venericardia* spp.

Venericardia planicosta Lamarck, Harris, 1899b. Not Lamarck, 1801, p. 123
See *Venericardia (Venericor) densata pendletonensis* Gardner and Bowles

Venericardia planicosta Lamarck, Richards, 1948; Richards, 1950. Not Lamarck, 1801, p. 123
See *Venericardia* spp.

Venericardia planicosta Lamarck, Waring, 1917. Not Lamarck, 1801, p. 123
See *Venericardia (Leuroactis) horatiana* Gardner

Venericardia planicosta Lamarck "var." Harris and Palmer
See *Venericardia* sp.

Venericardia planicosta Lamarck var. 5 error for δ [delta]
See *Venericardia* (*Venericor*) *bashiplate* Gardner and Bowles

Venericardia planicosta Lamarck form α [alpha] Harris, 1897b, p. 54;
Stewart, 1930, p. 157

Not specifically identified. Localities, Nanafalia, Tombigbee R. *Mar-
engo* Co., Ala.; 4 mi. above Hamilton Bluff, Alabama R., *Monroe* Co.,
Ala., Wilcox [Sabine] gr., Harris. Specimens unknown.

Venericardia planicosta Lamarck form β [beta] Harris, 1897b
See *Venericardia aposmithi* Gardner and Bowles

Venericardia planicosta Lamarck form γ [gamma] Harris, 1897b in
part; Dall, 1903a; Olsson, 1928
See *Venericardia* (*Venericor*) *horatiana* Gardner

Venericardia planicosta Lamarck form γ [gamma], Harris, 1919
See *Venericardia* sp.

Venericardia planicosta Lamarck form δ [delta] Harris, 1897b in part;
Harris, 1919; Dall, 1903a, p. 1422; Stewart, 1930, pp. 154, 156
See *Venericardia* (*Venericor*) *bashiplate* Gardner and Bowles
See also *V. (V.) hatcheplate* Gardner and Bowles
See also *V. (V.) claiboplata* Gardner and Bowles

Venericardia planicosta densata (Conrad)
See *Venericardia densata* (Conrad)

Venericardia planicosta klimacodes Gardner and Bowles
See *Venericardia* (*Venericor*) *klimacodes* Gardner and Bowles

Venericardia planicosta laticardo Dall, 1903a not Wood, 1871
See *Venericardia* (*Venericor*) *hatcheplate* Gardner and Bowles

Venericardia planicosta ocalaedes Harris
See "*Venericardia*" *ocalaedes* Harris

Venericardia planicosta var. *regia* Conrad
See *Venericardia* (*Venericor*) *regia* Conrad

Venericardia planicosta smithi Harris
See *Venericardia* (*Venericor*) *hijuana* Gardner and Bowles
See also *Venericardia* (*Venericor*) *smithi* Harris

Venericardia* (*Venericor*) *potapacoensis* Clark and Martin **Carditidae*

Venericardia planicosta Lamarck, Clark, 1896, p. 80 in part, pl. 23,
figs. 1a, 1b only; pl. 24, figs. 1a, 1b only; Veatch, 1906, pl. 14, figs.
1, 1a, 1b, 1c copy Clark. Not Lamarck, 1801, p. 123

Venericardia potapacoensis Clark and Martin, 1901, p. 179, pl. 40, fig.
4 holotype; figs. 5, 5a copies Clark, 1896, pl. 23, figs. 1a, 1b; figs. 6,
6a copies Clark pl. 24, figs. 1a, 1b; Dall, 1903a, p. 1423; not *V. aff.*
potapacoensis Clark and Martin, Dumble, 1908, p. 273; not Dum-
ble, 1915a, p. 490; Waring, 1917, pp. 54, 96, not Harris=Clark
and Martin; Harris, 1919, p. 77; Woods, 1922, p. 69; Stewart, 1930,
pp. 153, 160; Rutsch, 1936a, pp. 164, 169 [not p. 167=*V. diga*
Gardner and Bowles, 1939]; Chavan, 1936a, p. 117

Venericardia (Venericor) potapacoensis Clark and Martin, Gardner and Bowles, 1939, p. 180, pl. 41, figs. 3, 4, 6

Venericor potapacoensis (Clark and Martin), Vokes, 1961, p. 50

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—MD.: *Prince Georges Co.*, Piscataway Cr.; Upper Marlboro, gully SW. of town; 1 mi. SE. of Piscataway; *Charles Co.*, La Plata; W. of Port Tobacco (type); E. of Port Tobacco; head of Nanjemoy Cr., $\frac{1}{2}$ mi. below Chapel Point; 2 and $2\frac{1}{2}$ mi. above Popes Cr.; river bluff below Popes Cr.; Potomac R. VA.; *King George Co.*, Woodstock; about $\frac{1}{2}$ - $\frac{3}{4}$ mi. W. of Mathias Pt., Potomac R.; Potomac Cr., 50 ft. from top of bluff

Types.—Holotype, USNM; paratypes, ANSP

***Venericardia praecisa* Dall**

Carditidae

Venericardia rotunda Lea var. Harris, 1894b, p. 149

Venericardia praecisa Dall, 1903a, pp. 1424, 1427, 1429, pl. 56, figs. 7, 8; Schuchert, *et al.*, 1905, p. 689; Dall, 1916, pp. 488, 496 not Miocene; Stewart, 1930, p. 151

Venericardia diversidentata praecisa Dall, Harris and Palmer, 1946, p. 71, pl. 17, figs. 12-14; Brann and Kent, 1960, pp. 954, 955

Range.—Upper Eocene. White Bluff fm. (type), lower Jackson gr.

Localities.—ARK.: *Cleveland Co.*, Sta. 2232, sec. 32, T. 10 [?], R. 11 W. (type); Vince Ferry, Saline R.; near Cross Roads Church.

For further Ark. localities see Harris, 1894b

Type.—Holotype, No. 138638 USNM

***Venericardia (Venericor) regia* Conrad**

Carditidae

Venericardia planicosta Lamarck, Conrad, 1830, p. 215; H. C. Lea, 1849, p. 107; Clark; 1895, p. 5; Clark, 1896, p. 80 in part, pl. 21, fig. 3; pl. 22, fig. 2; pl. 23, fig. 1c; pl. 24, fig. 1c; pl. 25, figs. 1a, 1b, 1c. Not Lamarck, 1801, p. 123

Cardita planicosta (Lamarck), Conrad, 1832a, p. 20 in part, pl. 5, fig. 2; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Heilprin, 1884b, p. 87; Cossmann, 1893, p. 14; Harris, 1895b, p. 35

Venericardia planicosta var. *regia* Conrad, 1865a, p. 8; Conrad, 1865i, p. 364; Harris, 1894a, p. 302 in part; not Harris, 1896, p. 58; Clark and Martin, 1901, p. 178, pl. 38, figs. 1, 1a; pl. 39, figs. 1, 1a; pl. 40, figs. 1-3; Grabau and Shimer, 1909, p. 545, fig. 746; Waring, 1917, pp. 54, 55; Woods, 1922, pp. 66, 69

Venericardia regia Conrad, Conrad, 1866a, p. 5; Dall, 1903a, p. 1421; Stewart, 1930, pp. 154-157 in part; Rutsch, 1936a, pp. 162-164, 169, 180; Chavan, 1936a, p. 117; Chavan, 1936b, p. 166

Cardita (Venericardia) planicosta var. *regia* Conrad, de Gregorio, 1890, p. 214 in part, pl. 32, fig. 10 copy Conrad, 1832a

Not *Cardita regia* (Conrad), Heilprin, 1891a, p. 402

Venericardia (Venericor) regia Conrad, Gardner and Bowles, 1939, p. 46, figs. 8, 10 copy Clark and Martin

Venericor regia (Conrad), Vokes, 1961, p. 49, pl. 10, fig. 12

Range.—Paleocene. Aquia fm. (type)

Localities.—MD.: *Prince Georges Co.*, Piscataway (type); Upper Marlboro; Collington; Fort Washington; 1 mi. NE. of Piscataway; *Queen Annes Co.*, Rolphs Ldg., Chester R.; *Cecil Co.*, Fredericktown. See Clark and Martin, 1901 for further Md. localities. VA.: *Stafford Co.*, 1 mi. E. of Stafford courthouse; mouth of Potomac Cr.

Type.—Lectotype herein designated, specimen No. 12508 ANSP considered by Stewart, 1930, p. 154 as type. Not designated by Stewart or Gardner and Bowles, 1939, p. 187

Venericardia regia Conrad, Dall, 1903a in part; Stewart, 1930 in part
See *Venericardia aposmithii* Gardner and Bowles

Venericardia (Venericardia) rotunda Lea

Carditidae

Venericardia rotunda Lea, 1833, p. 70, pl. 2, fig. 48; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Harris, 1895b, p. 39; Dall, 1903a, pp. 1424, 1429; Harris, 1919, p. 78, pl. 29, figs. 4, 5; Rutsch, 1943, p. 156; Gardner, 1945, p. 93 in part; Harris and Palmer, 1946, p. 69, pl. 17, figs. 4, 5a, 6a; Verastegui, 1953, p. 38 ? *Glyptoactis*; Brann and Kent, 1960, p. 964

Cardita rotunda (Lea), Conrad, App. in Morton, 1834, p. 7; Bronn, 1848a, p. 227; Bronn, 1848b, p. 1352; Bronn, 1849, p. 297; d'Orbigny, 1850, p. 384; Tuomey, 1858, pp. 264, 273; Heilprin, 1884b, p. 86; not Heilprin, 1891a, p. 403; Cossmann, 1893, p. 14

Cardita (Venericardia) transversa Mut. *rotunda* (Lea), de Gregorio, 1890, p. 212, pl. 31, figs. 6-12, fig. 13 copy Lea

Venericardia rotunda fungina Harris, 1919, pp. 79, 80, pl. 28, figs. 4, 5; pl. 29, fig. 2; Brann and Kent, 1960, p. 964

Venericardia rotunda funiculus Harris, 1919, pp. 79, 80, pl. 28, figs. 6, 7; pl. 29, fig. 3; Brann and Kent, 1960, p. 964

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Probable syntypes, Nos. 5267, 5269, 5270 ANSP; syntypes *V. rotunda fungina* Harris, Nos. 641, 642, 645, PRI; syntypes *V. rotunda funiculus* Harris, Nos. 643, 644, 646 PRI

Venericardia rotunda Lea, F. B. Plummer, 1933. Not Lea, 1833, p. 70
See *Venericardia rotunda coloradensis* Harris

Venericardia rotunda Lea var. Harris, 1894b
See *Venericardia praecisca* Dall

Venericardia rotunda coloradonis Harris

Carditidae

Venericardia (rotunda ?) coloradonis Harris, 1919, p. 81, pl. 29, fig. 9; Brann and Kent, 1960, p. 953

Venericardia rotunda Lea, F. B. Plummer, 1933, p. 811, pl. 8, figs. 7a, 7b

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Localities.—TEXAS: Bastrop Co., Smithville, Colorado R. (type).

LA.: Sabine Par., Sabine R., near mouth of Bayou Negreet

Type.—Holotype, No. 652 PRI

Venericardia rotunda flabellum Harris

Carditidae

Venericardia rotunda var. *flabellum* Harris, 1919, p. 80, pl. 29, fig. 8

Venericardia flabellum Harris, F. B. Plummer, 1933, p. 811, pl. 8, figs. 8a, 8b

Venericardia rotunda flabellum Harris, Brann and Kent, 1960, p. 964

Range.—Middle Eocene. Weches. fm. (type), middle Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Smithville, Colorado R. (type)

Type.—Holotype, No. 651 PRI

Venericardia rotunda fungina Harris

See *Venericardia rotunda* Lea

Venericardia rotunda funiculus Harris

See *Venericardia rotunda* Lea

***Venericardia rotunda kingi* F. B. Plummer**

Carditidae

Venericardia flabellum kingi F. B. Plummer, 1933, p. 811, pl. 8, figs. 9a, 9b

Range.—Middle Eocene. "Crockett fm." (type); Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, Shipps Ford on Colorado R. just N. of Bastrop-Fayette Co. line

Types.—Syntypes, No. 21503 BEG (fig. 9a); No. 21502 BEG (fig. 9b)

Venericardia (rotunda) varying towards *trapaquara* Harris

See *Venericardia rotunda* Lea, subsp.

***Venericardia (Venericardia) rotunda* Lea, subsp.**

Carditidae

Venericardia (rotunda) varying towards *trapaquara* Harris, 1919, p. 80, pl. 29, figs. 6, 7; Brann and Kent, 1960, p. 965

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—MISS.: *Clarke Co.*, Wautubbee; [? Co.] "Johnson's place" (Harris Coll.)

Types.—Figured specimens, Nos. 649, 650 PRI

***Venericardia (Venericor) sabinensis* Barry**

Carditidae

Venericardia (Venericor) sabinensis Barry, 1942+, p. 61, pl. 7, figs. 4-9

Venericardia sabinensis Barry, Wasem and Wilbert, 1943, pp. 188, 192, pl. 31, fig. 10

Range.—Lower Eocene. Pendleton Ferry fm. (type), middle Wilcox [Sabine] gr.

Locality.—LA.: *Sabine Par.*, stream bed in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ SE. $\frac{1}{4}$ sec. 3, T. 5 N., R. 13 W. (type)

Types.—Holotype, No. 5161; paratypes, No. 5162, 5162A LSU Pal. Mus.

Venericardia scabricostata (Guppy), Richards and Palmer

See *Venericardia* sp.

***Venericardia (Claibornicardia) sillimani* Lea**

Carditidae

Venericardia Sillimani Lea, 1833, p. 69, pl. 2, fig. 47; Conrad, App. in Morton, 1834, p. 7; H. C. Lea, 1849, p. 107; Tuomey, 1858, p. 268; Conrad, 1865a, p. 8; Conrad, 1866a, p. 5; Aldrich, 1886, p. 44; Harris, 1895b, p. 42

Cardita alticostata Conrad, Conrad, App. in Morton, 1834, p. 7 in part; Bronn, 1848a, p. 224; Bronn, 1848b, p. 1352; Bronn, 1849, p. 297; d'Orbigny, 1850, p. 384 in part

Cardita (Venericardia) transversa Lea Mut. *Sillimani* Lea, de Gregorio, 1890, p. 212, pl. 31, fig. 1, copy Lea, figs. 2, 3

Cardita (Venericardia) transversa Lea Mut. *secans* de Gregorio, 1890, p. 212, pl. 31, figs. 4, 5; Cossmann, 1893, p. 14

Cardita transversa (Lea), Cossmann, 1893, p. 14 in part

Venericardia alticostata (Conrad), Dall, 1903a, pp. 1419, 1423, 1424 in part; Harris, 1919, p. 82, pl. 30, figs. 1, 2, not figs. 3-5; Brann and Kent, 1960, p. 951, Nos. 653, 654 only

Venericardia (Claibornicardia) sillimani Lea, Stenzel, Krause, and Twining, 1957, p. 110, pl. 14, figs. 1-4

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5253 ANSP [*fide* Harris notebook, 1895c]

Venericardia simplex (Wood), Dall, 1903a; not Wood, 1871, p. 151

See *Venericardia gulielmi* Gardner and Bowles

***Venericardia (Venericor) smithii* Aldrich**

Carditidae

Venericardia planicosta Lamarck, Harris, 1894b, p. 42 in part. Not Lamarck, 1801, p. 123

Venericardia smithii Aldrich, 1894b, p. 243, pl. 12, figs. 1a, 1b; Dall, 1903a, pp. 1422, 1425; Grabau and Shimer, 1909, p. 544, fig. 747 [rt. valve] [*smithi*]; F. B. Plummer, 1933, pp. 543, 547, 551, 552, 811, 812, pl. 8, figs. 4a, 4b; Chavan, 1936a, p. 117

Venericardia planicosta smithi Aldrich, Harris, 1896, p. 59 in part, pl. 4, fig. 14 copy Aldrich; pl. 5, figs. 1, 2; Woods, 1922, p. 68

Venericardia (Venericor) smithii Aldrich, Gardner, 1935, pp. 157, 160, pl. 12, figs. 3, 4 copies syntypes; Gardner and Bowles, 1939, p. 185, pl. 43, figs. 2, 3; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 15 copy Aldrich (*smithi*)

Range.—Paleocene. Clayton fm. (type), lower Midway gr.; Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

Localities.—ALA.: Wilcox Co., "Prairie Creek, near Allenton, hills in and near Mr. McConnico's plantation" (type). GA.: Schley Co., Wall's Crossing, 4 mi. E. of Ellaville. See Harris, 1896 for additional localities. See Gardner and Bowles, 1939, p. 186 for Texas localities

Types.—Syntypes, No. 638913 USNM (figs. 1, 1a); No. 4 GSATC (fig. 1b)

***Venericardia (Venericor) stewarti* Gardner and Bowles**

Carditidae

Venericardia horatiana Gardner, Stewart, 1930, p. 161 in part

Venericardia (Venericor) stewarti Gardner and Bowles, 1939, p. 178, pl. 39, figs. 4, 6, 7

Range.—Middle Eocene. Weches fm., middle Claiborne gr.; Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, a short distance below Lisbon Ldg., Alabama R., Bed 4, Cooke sec. (type). TEXAS: Sabine Co., Sulphur Branch, near Sabinetown, Sabine R.

Types.—Holotype, No. 154933; paratype, No. 116027 USNM

Venericardia (?) subquadrata (Conrad)**Carditidae**

Cardita subquadrata Conrad, 1848a, p. 298; Conrad, 1848b, p. 128, pl. 14, fig. 10; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86. Not *Cardita subquadrata* Gabb, 1860a; Gabb, 1860d

Venericardia subquadrata (Conrad), Conrad, 1865a, p. 8 "A" error; "?" *subquadrata* Conrad, 1866a, p. 5; Harris, 1919, pl. 31, fig. 7 copy Conrad

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr. *Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing ANSP Moore, 1962, p. 99

Venericardia (?) subrotunda (Conrad)**Carditidae**

Cardita subrotunda Conrad, 1848a, p. 298; Conrad, 1848b, p. 129, pl. 14, fig. 11; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86

Venericardia subrotunda (Conrad), Dall, 1903a, p. 1424; Harris, 1919, pl. 31, fig. 9 copy Conrad

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr. *Locality*.—S.C.: Calhoun Co., "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing ANSP Moore, 1962, p. 100

Venericardia tetrica (Conrad)

See *Cardita tetrica* Conrad *nomen nudum*

Venericardia (?) texalana Gardner**Carditidae**

Venericardia trapaquara Harris, 1919, p. 81 in part, pl. 30, fig. 7; Brann and Kent, 1960, p. 967, No. 659 only

Venericardia trapaquara subsp. *texalana* Gardner, 1927, p. 370, figs. 24-27

Venericardia texalana Gardner, F. B. Plummer, 1933, p. 811, pl. 8, figs. 5a, 5b

Venericardia trapaquara texalana Gardner, Stenzel, Krause, and Twinning, 1957, p. 106 "not subspecies *V. (C.) trapaquara* Harris"

Range.—Middle Eocene. Weches fm. (type) (*vide* Stenzel, Krause, and Twinning), middle Claiborne gr.

Locality.—TEXAS: Burleson Co., Black Shoals, Brazos R. (type) [same as Collier's Ferry *vide* Stenzel, Krause, and Twinning, 1957, p. 106]

Type.—Holotype, ANSP

Venericardia (Pleuromeris) tortidens Harris**Carditidae**

Venericardia (Pleuromeris) tortidens Harris, 1919, p. 87, pl. 31, figs. 12, 12a, 12b; Harris and Palmer, 1946, p. 74, pl. 17, figs. 24, 27-29 copy Harris, 1919; Brann and Kent, 1960, p. 967

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

Localities.—ALA.: Monroe Co., Lisbon Bluff, Alabama R. (type); Claiborne Bluff, Alabama R.

Types.—Syntypes, Nos. 672, 672a PRI

Venericardia transversa Lea

See *Venericardia (Claibornicardia) alticostata* (Conrad)

Venericardia (Claibornicardia) trapaquara Harris**Carditidae**

Venericardia trapaquara Harris, 1895a, p. 48, pl. 1, fig. 7; 1919, p. 81 in part, pl. 30, figs. 6, 8 (type), 9 (not fig. 7=*V. texalana* Gardner); Harris and Palmer, 1946, pp. 68, 71; Brann and Kent, 1960, p. 967

Venericardia, n. sp. Renick and Stenzel, 1931, p. 104

Venericardia (Claibornicardia) trapaquara Harris, Stenzel, Krause, and Twining, 1957, p. 114, pl. 14, figs. 6-11

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Localities.—TEXAS: *Robertson Co.*, Cedar Cr., SE. corner of Wheelock League, 200 yds. N. of Brazos Co. line (Bur. Ec. Geol. loc. No. 197-T-3) (type); *Burleson Co.*, Stone City Bluff, Brazos R.; *Houston Co.*, bluff left bank Trinity R., 0.85 mi. air-line distance N. of Alabama Ferry

Type.—Holotype, No. 20502 BEG

Venericardia trapaquara texalana Gardner

See *Venericardia* (?) *texalana* Gardner

Venericardia (?) trapezium (Tuomey)**Carditidae**

Cardita trapezium Tuomey, 1853, p. 194; Dall, 1903a, p. 1424

Range.—Cretaceous mixed with Eocene. Near Wilmington, N.C. Cretaceous is in contact with Tertiary. (Stanton, 1891, pp. 333-334; Stephenson, 1923, p. 192; Kellum, 1926, p. 3)

Locality.—N.C.: *New Hanover Co.*, Wilmington (type)

Type.—Unknown

Venericardia (Venericor) turneri Gardner and Bowles**Carditidae**

Venericardia (Venericor) turneri Gardner and Bowles, 1939, p. 179, pl. 41, figs. 1, 2

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Washington Co.*, Hatchetigbee Bluff, Tombigbee E. (type)

Type.—Holotype, No. 372921 USNM

Venericardia vicksburgiana Dall**Carditidae**

Venericardia vicksburgiana Dall, 1903a, p. 1428, pl. 56, fig. 6; Schuchert, et al., 1905, p. 690

Range.—Upper Eocene. "Ocala ls.", Ocala gr.

Locality.—FLA.: *Marion Co.*, Martin Sta. near Ocala (type)

Type.—Holotype, No. 164548 USNM

Venericardia (?) vigintinaria (Conrad)**Carditidae**

Cardita vigintinaria Conrad, 1848a, p. 297; Conrad, 1848b, p. 128, pl. 14, fig. 12; Conrad in Wailes, 1854, p. 287 (reprint, 1939, p. 10); Harris, 1919, p. 86

Venericardia vigintinaria (Conrad), Dall, 1903a, p. 1424; Harris, 1919, p. 77, pl. 31, fig. 10 copy Conrad (*vigintinaria*)

Range.—Middle Eocene. McBean fm. (type), upper Claiborne gr.

Locality.—S.C.: *Calhoun Co.*, "St. Matthew's Parish, Orangeburg District" (type)

Type.—Missing ANSP Moore, 1962, p. 109 *C. virgintinaria* [sic]

Venericardia (?) whitei Gardner**Carditidae**

Venericardia alticostata Conrad var., Harris, 1896, p. 57 in part not pl. 5, fig. 3=*V. moa*; not *Cardita alticostata* Conrad, 1833a, p. 342 as stated in Harris, 1896, p. 57

Venericardia (alticostata) subsp. (?) whitei Gardner, 1923, p. 112, pl. 32, fig. 3

Venericardia whitei Gardner, Trowbridge, 1932, pl. 31, fig. 3 copy Gardner type; Gardner, 1935, p. 166 under subgenus *Glyptoactis*

Range.—Paleocene. Tehuacana mem. (type), Kincaid fm., lower Midway gr.

Localities.—TEXAS: *Uvalde Co.*, bluff on Frio R. ½ mi. below Evans' (Myrick's) apiary (type); 11 mi. S. of Sabinal, a few hundred yards S. of the junction of Elm Cr. with Sabinal Cr.

Type.—Holotype, No. 352269 USNM

Venericardia (?) wilcoxensis Dall**Carditidae**

Venericardia alticostata Conrad "var." Harris, 1896, p. 58 in part, pl. 4, fig. 12 not of Conrad; Shimer and Shrock, 1944, p. 419, pl. 167, fig. 16 (*alticosta sic*) copy Harris, 1896; Brann and Kent, 1960, p. 951 No. 38 only

Venericardia wilcoxensis Dall, 1903a, p. 1426, pl. 54, fig. 12; Schuchert, *et al.*, 1905, p. 690; Harris, 1919, p. 84, pl. 30, fig. 11; Cooke, 1926a, pl. 93, fig. 4; Semmes, 1929, fig. 51-4; F. B. Plummer, 1933, p. 811, pl. 8, figs. 3a, 3b; Gardner, 1935, p. 163, pl. 14, fig. 1 holotype, figs. 2, 3 copy Cooke; Rutsch, 1943, p. 156; Brann and Kent, 1960, p. 968

Venericardia wilcoxensis tripla Dall, 1903a, p. 1426; Gardner, 1935, p. 164

Range.—Paleocene. Matthews Ldg. mem. (type), uppermost Porters Creek fm., upper Midway gr.

Localities.—ALA.: *Wilcox Co.*, Matthews Ldg., 9 mi. W. of Camden, sec. 12, T. 12 N., R. 6 E., Alabama R. (type from specimen also Schuchert, *et al.*); Dale's Br., 1 mi. NW. of Oak Hill (Gardner, 1935, not type as stated, p. 164); near Graveyard Hill

Type.—Holotype, No. 164542 USNM

***Venericardia wilcoxensis tripla* Dall=*V. wilcoxensis* Dall**

Venericardia wilcoxensis tripla Dall, 1903a, p. 1426; Gardner, 1935, p. 164

In 1903 Dall called attention to a specimen the ribs of which could be differentiated from the typical *V. wilcoxensis* and gave the name *trippla* as a "variety". The specimen so-named is available. The form does not seem to be worthy of a separate name from the species, *V. wilcoxensis*. To satisfy nomenclatorial procedure, we designate the specimen No. 129-897 USNM as the lectotype of *trippla*. Thus established, the name falls in the synonymy of *V. wilcoxensis* Dall, which see.

Range.—Paleocene. Naheola fm. (type), upper Midway gr.

Locality.—ALA.: *Wilcox Co.*, Dale's Branch near Allentown (loc. 287 USGS) (type). Also indicated as Dale's Br., 1 mi. NW. of Oak Hill P.O. (3106 USGS)

Type.—Lectotype *trippla*, herein designated, No. 129897 USNM

Venericardia (?) withlacoochensis Richards**Carditidae**

Venericardia withlacoochensis Richards in Richards and Palmer, 1953, p. 47, pl. 10, fig. 5

Range.—Upper Eocene, Inglis fm. (type), lower Ocala gr.

Locality.—FLA.: *Levy Co.*, a rd. metal pit 2.9 mi. S. of N. limits of Gulf Hammock just SW. of State Road 55 in SW. $\frac{1}{4}$ sec. 34, T. 14 S., R. 16 E. (type)

Type.—Holotype, No. I-7539 Fla. Geol. Sur.

Venericardia, n. sp. Renick and Stenzel, 1931

See *Venericardia* (*Claibornicardia*) *trapaquara* Harris

Venericardia "sp. nov." Harris, 1894b, pl. 1, fig. 7

See *Venericardia moa* Gardner and Bowles

Venericardia sp.**Carditidae**

Venericardia scabricostata (Guppy), Richards and Palmer, 1953, p. 47, pl. 10, figs. 1, 2; not *Cardita scabricostata* Guppy, 1886, p. 292, pl. 18, fig. 10; not Maury, 1917 [not 1919 as in Richards and Palmer], p. 198, pl. 33, fig. 1

Range.—Middle Eocene. Avon Park ls., upper Claiborne gr. Upper Eocene. Inglis fm., lower Ocala gr.

Localities.—FLA.; *Levy Co.*, road metal pit 2.9 mi. south of north limits of Gulf Hammock, just SW. of State Road 55 in SW. $\frac{1}{4}$ sec. 34, T. 14 S., R. 16 E.; New Lebanon dolomite pit, sec. 12, T. 16 S., R. 16 E.; dredged channel of Waccassassa R. in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 8, T. 14 S., R. 16 E. below bridge on State Road 55; along Withlacoochee R. at dam of Florida Power Corp. in SW. $\frac{1}{4}$ SW. $\frac{1}{4}$ sec. 8, T. 17 S., R. 17 E.

Types.—Figured specimens, Nos. I-7533, I-7534 Fla. Geol. Sur.

Venericardia sp.**Carditidae**

Venericardia planicosta Lamarck var., Richards, 1948, p. 2, pl. 1, fig. 6; Richards, 1950, pp. 14, 75, fig. 63f. Not Lamarck, 1801, p. 123

Range.—Middle Eocene. (? Claiborne gr.)

Locality.—N.C.: *Johnston Co.*, about 3 mi. W. of Clayton

Type.—Figured specimen, probably ANSP

"Venericardia" sp. [yg. fide Meyer]**Carditidae**

Micromeris senex Meyer, 1886b, p. 81, pl. 3, fig. 22; Meyer, 1887a, p. 16 said it was a young *Venericardia*; Dall, 1903a, p. 1480 appeared to agree; Harris and Palmer, 1946, p. 78, pl. 18, fig. 19

Astarte (*Micromeris*) *senex* Meyer, de Gregorio, 1890, p. 200, pl. 27, fig. 30 copy Meyer

Crassatella (*Micromeris*) *senex* Meyer, Museum label Alabama Museum Natural History

Range.—Upper Eocene. "Bed g" 1st bed above *Scutella* bed, lower Jackson gr.

Locality.—ALA.; *Monroe Co.*, Claiborne Bluff "bed g", Alabama R.

Type.—Figured specimen, No. 65 GSATC

Venericardia (Pleuromeris) sp.**Carditidae**

Venericardia parva var. *Jacksonensis* Meyer, 1885a, p. 460; Harris and Palmer, 1946, p. 75, pl. 17, figs. 19-21; Brann and Kent, 1960, p. 959. Not *V. Jacksonensis* Conrad, 1866a *nomen nudum*
 Not *Venericardia inflatior* var. *Jacksonensis* Meyer, 1885a, p. 460

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.
Locality.—MISS.: *Hinds Co.*, Jackson

Type.—Holotype *V. parva jacksonensis* JHU *fide* Harris, 1946; not found USNM 1962

Venericardia sp.**Carditidae**

Venericardia sp., Kellum, 1926, p. 23, pl. 3, fig. 4

Range.—Upper Eocene. Castle Hayne ls., Jackson gr.

Locality.—N.C.: *New Hanover Co.*, Wilmington

Type.—Figured specimen, No. 353250 USNM

Venericardia sp.**Carditidae**

Venericardia planicosta Lamark "var." Harris and Palmer, 1946, p. 65, pl. 15, figs. 1-11; pl. 16, figs. 1-6, 9; Brann and Kent, 1960, pp. 960, 961

Venericardia (Venericor) planicosta cf. *densata* Conrad, Wilbert, 1953, p. 123, pl. 2, fig. 1

Range.—Upper Eocene. Lower and upper Jackson gr.

Localities.—ARK.: *St. Francis Co.*, Crow Cr.; *Jefferson Co.*, White Bluff, Arkansas R. MISS.: *Hinds Co.*, Jackson. LA.: *Grant Par.*, Montgomery, Red R.; *Caldwell Par.*, Bunker Hill, Ouachita R.

Types.—Figured specimens, Nos. 4256—4267 PRI

Venericardia sp.**Carditidae**

Venericardia planicosta gamma Harris, 1919, p. 77, pl. 28, fig. 3; pl. 29, fig. 1; Brann and Kent, 1960, p. 962

Range.—Middle Eocene. Cook Mt. fm., [upper Lisbon fm.], upper Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Lisbon Bluff, Alabama R.

Type.—Figured specimen, No. 640 PRI

Venericardia spp.**Carditidae**

Venericardia planicosta Lamarck, Harris, 1897b, p. 54, pl. 9, figs. 1, 2, 3; Brann and Kent, 1960, p. 960. Not Lamarck, 1801, p. 123

Range.—Lower Eocene. Middle and upper Wilcox [Sabine] gr.

Localities.—ALA.: *Monroe Co.*, Bells Ldg., Alabama R.; *Clarke Co.*, Woods Bluff, Tombigbee R.

Types.—Figured specimens, Nos. 156, 157 PRI (3d specimen lost)

Venericardia spp.**Carditidae**

Venericardia spp. Gardner, 1935, pp. 166, 168, 170, 171

Range.—Paleocene. Kincaid fm., lower Midway gr.; Wills Point fm., upper Midway gr.

Localities.—TEXAS: *Medina Co.*, Verde Cr., 4½ mi. NE. of Hondo; *Hunt Co.*, 14 mi. SE. of Greenville; *Bazar Co.*, Jet

Crossing, 3 mi. below Garza Crossing; *Guadalupe Co.*, Guadalupe R., 2½ mi. above power house S. of Sequin
Types.—Unfigured specimens not found USNM, 1962

Venericardia spp.**Carditidae**

Venericardia cf. *nodifera* Kellum, Harris, 1951, p. 16, pl. 7, figs. 9-11;
 Brann and Kent, 1960, p. 958. Not Kellum 1926, p. 36 Miocene

Range.—Upper Eocene. "Ocala ls." Ocala gr.

Localities.—FLA.: *Marion Co.*, E. of Kendrick; 1 mi. S. of Reddick

Types.—Figured specimens, 24476-24478 PRI

Veniella decisa Morton, Whitfield

See *Veniella* sp.

Veniella ? rhomboidea (Conrad)**Arcticidae**

(also placed in **Pleurophoridae**)

Venilia ? rhomboidea Conrad, 1853a, p. 275, pl. 24, fig. 7 (Dall reprint, 1909, p. 161)

Veniella ? rhomdoidea (Conrad), Whitfield, 1885, p. 215, pl. 28, figs. 12, 13 type; Johnson, 1905, p. 14; Weller, 1907, p. 538, pl. 58, figs. 22-24

Range.—Lower Eocene. Manasquan fm. (type)

Locality.—N.J.: *Ocean Co.*, near New Egypt; *Monmouth Co.*, near Farmingdale; *Burlington Co.* (type)

Type.—In ANSP 1905, *fide* Johnson

Veniella sp.**Arcticidae**

(also placed in **Pleurophoridae**)

Veniella decisa (Morton), Whitfield, 1885, p. 145, pl. 19, figs. 15, 16 not *Cardita decisa* Morton, 1833a, p. 292; 1833b, pl. 9, fig. 3 see Weller, 1907, p. 541; Whitfield, 1899, p. 166

Veniella ? decisa (Morton), Weller, 1907, p. 540, pl. 58, figs. 25-26 Whitfield's specimen

Range.—Paleocene. Hornerstown fm.?

Localities.—N.J.: ? Co., Blue-Ball; *Gloucester Co.*, I. Stratton, near Mullica Hill

Type.—Figured specimen, No. 7492 N.J. St. Mus. Trenton

Venus discoidalis (Conrad)

See *Rhadopitaria discoidalis* (Conrad)

"Venus" [indet.] jacksonensis Meyer**Veneridae**

Venus jacksonensis Meyer, 1887a, p. 12, pl. 2, fig. 4; Palmer, 1927/1929, p. 195, pl. 33, fig. 9 copy Meyer

"*Venus*" *jacksonensis* Meyer, Harris and Palmer, 1946, p. 96, pl. 21, fig. 9a copy Meyer

Range.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, No. 638890 USNM

Venus poulsoni (Conrad)

See *Pitar poulsoni* (Conrad)

Venus retisculpta Meyer

See *Textivenus retisculpta* (Meyer)

Venus ripleyana Gabb

See *Pitar ripleyana* (Gabb)

Venus subcrassa (Lea)

See *Rhabdopitaria subcrassa* (Lea)

Venus trigoniata (Lea)

See *Katherinella trigoniata* (Lea)

Venus vespertina Conrad

See ? *Pitar vespertina* (Conrad)

Verticordia (Trigonulina) cossmanni Dall

Verticordiidae

"*Verticordia eocoenensis* Langdon em.", Cossmann, 1893, p. 7, pl. 1, fig. 6

Verticordia (Trigonulina) cossmanni Dall, 1903a, p. 1512 Eocene only; Harris and Palmer, 1946, p. 112, pl. 23, fig. 23 copy Cossmann; Stenzel, Krause, and Twining, 1957, p. 179

Range.—Upper Eocene. Moodys Br. fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Specimen figured, formerly Cossmann Coll., Lab. Geol., Sorbonne, Paris. Not present in June, 1962 *vide* M. Beauvais

Verticordia (Verticordia) eocensis Langdon

Verticordiidae

Verticordia Eocensis Langdon, 1886, p. 208 described; Aldrich, 1886, p. 40, pl. 6, fig. 13 figured; Harris, 1919, p. 182 in part, pl. 55, fig. 13 not fig. 14 copy Dall; Harris and Palmer, 1946, p. 111, pl. 23, fig. 24; Stenzel, Krause, and Twining, 1957, p. 179 *V. (Verticordia)*; Brann and Kent, 1960, p. 973

Not *Verticordia eocoenensis* Langdon em., Cossmann, 1893, p. 7, pl. 1, fig. 6 not of Langdon. See *Verticordia cossmanni*

Not *Verticordia eocoenensis* Langdon em. Dall, 1900, p. 1198, pl. 42, figs. 13, 14; Dall, 1903a, p. 1510 in part; Schuchert, *et al.*, 1905, p. 692 see *Verticordia* sp.

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type), label with Aldrich specimen. Langdon indicated Claiborne and Jackson originally. Type (Aldrich) is from Claiborne.

Type.—Holotype, No. 638722 USNM

"*Verticordia eocoenensis* Langdon em." Cossmann

See *Verticordia (Trigonulina) cossmanni* Dall

Verticordia eocensis Langdon "var." Harris, 1919

See *Verticordia* sp.

Verticordia eocensis sotoensis Aldrich

See *Verticordia (Trigonulina) sotoensis* Aldrich

Verticordia (Haliris) granuloides Aldrich**Verticordiidae**

Verticordia (Haliris) granuloides Aldrich, 1908b, p. 75, pl. 5, fig. 10

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 639057 USNM

Verticordia (Haliris) mississippiensis Dall**Verticordiidae**

Verticordia (Haliris) mississippiensis Dall, 1900, p. 1198, pl. 42, fig. 1; Dall, 1903a, p. 1510; Schuchert, *et al.*, 1905, p. 692; Harris, 1919, p. 181, pl. 55, fig. 9; Stenzel, Krause, and Twining, 1957, p. 179

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., a cut on Southern R.R. about 0.4 mi. N. of highway overpass of U.S. Highway 11 at Wautubbee (type)

Type.—Holotype, No. 107453 USNM

Verticordia (Haliris) quadrangularis (Aldrich)**Verticordiidae**

Verticordia quadrangularis Aldrich, 1903, p. 101, pl. 4, figs. 22, 23; Stenzel, Krause, and Twining, 1957, p. 179

Range.—Lower Oligocene

Locality.—MISS.: Wayne Co., Red Bluff (type, from label with holotype)=Hiwatee sta., Chickasawhay R.

Although this is an Oligocene species it is included in this catalogue because information has been lacking as to the locality from which it was described. The problem is solved because the label which was with the holotype in the Aldrich Coll. stated Red Bluff, Miss.

Type.—Holotype, No. 644634 USNM

Verticordia (Trigonulina) satex Gardner**Verticordiidae**

Verticordia satex Gardner, 1927, p. 367, figs. 22, 23

Verticordia (Trigonulina) satex Gardner, Stenzel, Krause, and Twining, 1957, p. 178

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.

Localities.—TEXAS: Burleson Co., Moseleys Ferry, Stone City Bluff, Brazos R. (type). LA.: Winn Par., St. Maurice; Jackson Par., in gullies N. of old Quitman-Liberty Hill rd. and W. of Madden Cr., 3.6 mi. W. on rd. from Quitman R.R. crossing, Bur. Eco. Geol. loc. No. La. 7

Type.—Holotype, No. 369240 USNM

Verticordia (Trigonulina) sotoensis Aldrich**Verticordiidae**

Verticordia sotoensis Aldrich, 1903, p. 100, pl. 4, figs. 19-21

Verticordia eocensis var. *sotoensis* Aldrich, Harris, 1919, p. 182, pl. 55, fig. 10-12

Verticordia (Trigonulina) sotoensis Aldrich, Stenzel, Krause, and Twining, 1957, p. 178

Range.—Middle Eocene. (Archusa ml. mem. *vide* Stenzel, *et al*, 1957, p. 178), Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Clarke Co., De Soto (type from type label); McLeod's mill, Suwanlovey Cr., 6 mi. W. DeSoto Station on railroad.

Types.—Syntypes, No. 639021 USNM (figs. 19, 20); 2 unfigured syntypes, No. 639022 USNM; fig. 21 missing, 1962

Verticordia sp.

Verticordiidae

Verticordia sp. Harris, 1896, p. 71, pl. 6, fig. 16; Stenzel, Krause, and Twining, 1957, p. 177; Brann and Kent, 1960, p. 973

Range.—Paleocene. Matthews Ldg. mem., uppermost Porters Cr. fm., upper Midway gr.

Locality.—ALA.: Wilcox Co., 1 mi. W. of Oak Hill P.O.

Type.—Figured specimen, lost PRI prior to 1937

Verticordia sp.

Verticordiidae

Verticordia eocenensis Langdon em. Dall 1903a, p. 1510 in part, not Langdon, pl. 42, figs. 13, 14; Schuchert, *et al*, 1905, p. 692; Harris, 1919, pl. 55, fig. 14 copy Dall

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—MISS.; Clarke Co., Wautubbee [*sic*] Wautubbee Hills

Type.—Figured specimen, No. 107452 USNM

Verticordia sp.

Verticordiidae

Verticordia eocensis Langdon "var." Harris, 1919, p. 182, pl. 55, figs. 15, 16; Brann and Kent, 1960, p. 973

Range.—Middle Eocene. Stone City beds, middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

Localities.—MISS.: Newton Co., Hickory. TEXAS: Sabine Co., Outcrop 21, Sabine R. opposite SW. corner SE. $\frac{1}{4}$ sec. 35, T. 5 N., R. 13 W.; Sabine Par., La. (Veatch Survey, 1902, p. 129)

Types.—Figured specimens, Nos. 1269, 1270 PRI

Verticordia sp.

Verticordiidae

Verticordia (Trigonulina) dalliana Aldrich var. Harris and Palmer, 1946, p. 112 in part, pl. 23, fig. 26 not 25; Brann and Kent, 1960, p. 973

Range.—Upper Eocene. Tullos mem., Yazoo cl., upper Jackson gr.

Locality.—LA.: Caldwell Par., Bunker Hill Ldg., Ouachita R.

Type.—Figured specimen, No. 4396 PRI

Vokesula aldrichi (Meyer)

Corbulidae

Corbula rugosa Lamarck, Heilprin, 1881, p. 364. Not Lamarck, 1806a, p. 467

Corbula oniscus Conrad, Heilprin, 1881, p. 364. Not Conrad, 1833a

Corbula gibbosa Lea, Heilprin, 1881, p. 364. Not Lea, 1833

Corbula aldrichi Meyer, 1885b, p. 67; Meyer, 1886b, p. 83, pl. 1, fig. 21; de Gregorio, 1890, p. 234, pl. 37, fig. 21 copy Meyer; Cossmann, 1893, p. 7; Clark, 1895, p. 5; Clark, 1896, p. 74; Harris, 1897b, p. 67, pl. 13, figs. 12, 13, 13a; Clark and Martin, 1901, p. 163, pl. 32, figs. 3, 3a, 4, 4a, 5, 5a, 6, 6a [not Aldrich as in reference]; Harris 1919, p. 189, pl. 57, figs. 7-9; Shimer and Shrock, 1944, p. 431, pl. 172, fig. 13, 14 copy Clark and Martin; Brann and Kent, 1960, pp. 255, 256

Corbula (Cuneocorbula) aldrichi Meyer, Dall, 1898b, pp. 841, 842

Corbula (Caryocorbula) aldrichi Meyer, Barry, 1942+, p. 73, pl. 10, figs. 2, 3; Gardner, 1945, p. 132 in part

Cf. *Vokesula aldrichi* (Meyer), Stenzel, Krause, and Twining, 1957, p. 174

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr. Md. horizons see Clarke and Martin

Localities.—ALA.: *Clarke Co.*, Woods Bluff, near mouth of Bashi Cr., Tombigbee R. (type); *Monroe Co.*, Greggs Ldg. Alabama R.; 4 mi. above Hamilton Bluff, Alabama R.; *Dale Co.*, Ozark; NE. *Washington Co.*, Hatchetigbee Bluff, Tombigbee R. For TEXAS and LA. localities see Barry, 1942+. For MD. localities see Clark and Martin, 1901.

Type.—Holotype, No. 37 GSATC

***Vokesula smithvillensis smithvillensis* (Harris)**

Corbulidae

Corbula rugosa Lamark, Heilprin, 1891a, p. 401. Not Lamarek, 1806a, p. 467

Corbula aldrichi Meyer var. *smithvillensis* Harris, 1895a, p. 52, pl. 3, figs. 5, 5a

Corbula (Cuneocorbula) gregorioi Cossmann, Dall, 1898b, p. 843 in part. Not Cossmann, 1893

Corbula smithvillensis Harris, Harris, 1919, p. 188 in part, pl. 57, figs. 12-17, not figs. 10, 11; Deussen, 1924, p. 67 in part (loc. I and N only), pl. 22, figs. 7, 7a; Renick and Stenzel, 1931, p. 107, not, p. 103; Trowbridge, 1932, pl. 41, figs. 6, 7; Brann and Kent, 1960, p. 270 in part, p. 271, not Nos. 1341, 1342 (=var. *petropolitana*)

"*Corbula*" *smithvillensis* Harris, Vokes, 1944, p. 621 "probably *Caestocorbula*"

Corbula (Varicorbula) smithvillensis Harris, Gardner, 1945, p. 128 in part, not pl. 9, figs. 2-4, 7-9=var. *petropolitana* Stenzel and Twining

Vokesula smithvillensis smithvillensis (Harris), Stenzel, Krause, and Twining, 1957, p. 174, pl. 21, figs. 11-21

Range.—Middle Eocene. Viesca mem. (type), Weches fm., middle Claiborne gr.; Cane R. fm., middle Claiborne gr.

Localities.—TEXAS: *Bastrop Co.*, bluff on right bank of Colorado R. at Smithville about 625 feet downstream from the new bridge on State Highway 71 (Bur. Ec. Geol. loc. No. 11-T-2) (type); *Burleson Co.*, Burleson Shell Bluff, Brazos R.; Moseleys Ferry (Stone City Bluff), Brazos R.; *Robertson Co.*, Cedar Cr., Wheelock League; Elm Cr.; *Cherokee Co.*, 2 mi. E. of Alto; Berryman's Land; 2 mi. S. of Mt. Selman P.O.; *Gonzales Co.*, 1 mi. S. of Nevilles; *Nacogdoches Co.*, 15 mi. SE. of Nacogdoches; *Houston Co.*, Alum Bluff, Trinity R. MISS.; *Clarke Co.*, near Enterprise

Types.—Holotype and paratype, No. 462 Old Texas Geology Survey Coll. Holotype, No. 35498 BEG, unfigured paratypes, No. 35499 BEG

***Vokesula smithvillensis petropolitana* Stenzel and Twining**

Corbulidae

Corbula smithvillensis Harris, Harris, 1919, p. 188 in part, pl. 57, figs. 10-11, not figs. 12-17; Deussen, 1924, p. 67 in part (loc. E, F, and P

only), not pl. 22, figs. 7, 7a; Renick and Stenzel, 1931, p. 103, not p. 107

Corbula (Varicorbula) smithvillensis Harris, Gardner, 1945, p. 128 in part, pl. 9, figs. 2-4, 7-9

Vokesula smithvillensis petropolitana Stenzel and Twining, in Stenzel, Krause, and Twining, 1957, p. 176, pl. 21, figs. 22-29; pl. 22, figs. 1-6

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: *Burleson Co.*, Stone City Bluff, Brazos R. (type)

Types.—Holotype No. 20624 (pl. 22, figs. 1, 2) BEG, paratypes No. 20620 (pl. 21, figs. 22, 23) BEG, No. 20621 (pl. 21, figs. 24, 25) BEG, No. 20618 (pl. 21, figs. 26, 27) BEG, No. 20619 (pl. 21, figs. 28, 29) BEG, No. 20625 (pl. 22, figs. 3, 4) BEG. Plate 22, figs. 5, 6 missing 1964

Volsella

See *Modiolus*

Volsella alabamensis (Aldrich)

See *Brachidontes alabamensis* (Aldrich)

See also *Brachidontes potomacensis* (Clark)

Volsella (Brachidontes) cretacea (Conrad)

See *Modiolus cretaceus* Conrad

Volsella (Arcoperna) filosa Conrad

See *Arcoperna filosa* Conrad

Volsella saffordi (Gabb)

See cf. *Brachidontes saffordi* (Gabb)

Volsella ? tenuis (Meyer)

See *Crenella ? tenuis* (Meyer)

Volsella sp.

See *Modiolus* sp.

Vulsella ocalensis MacNeil

See *Exputens ocalensis* (MacNeil)

***Xylophaga ? mississippiensis* Meyer and Aldrich**

Pholadidae

Xylophaga ? mississippiensis Meyer and Aldrich, 1886, pp. 46, 50, pl. 2, fig. 24; Harris, 1919, p. 198, pl. 59, fig. 13 copy Meyer and Aldrich [credited Meyer only]; Dall, 1898b, p. 821 [credited Aldrich only]

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: *Newton Co.*, Newton (type)

Type.—Holotype, No. 638748 USNM

Yoldia albaria Conrad

See *Nuculana albaria* (Conrad)

Yoldia aldrichiana Harris

See *Calorhadia (Litorhadia) aldrichiana* (Harris)

Yoldia claibornensis (Conrad)

See *Orthoyoldia claibornensis* (Conrad)

Yoldia corpulentoides Aldrich

See *Nuculana corpulentoides* (Aldrich)

- Yoldia cultelliformis* (Rogers and Rogers)
See *Nuculana cultelliformis* (Rogers and Rogers)
- Yoldia eborea* (Conrad)
See *Jupiteria* (*Ledina*) *smirna* (Dall)
See also *Jupiteria* (*Ledina*) *jonesi* Gardner
- Yoldia kindlei* Harris
See Cf. *Orthoyoldia kindlei* (Harris)
- Yoldia protexta* Conrad not Gabb
See *Nuculana albaria* (Conrad)
- Yoldia psammotaea* Dall
See *Orthoyoldia psammotaea* (Dall)
- Yoldia psammotaea* Dall, Harris, 1919
See *Orthoyoldia* spp.
- Yoldia* (*Nuculana* ?) *psammotaea* Dall "var.", Harris and Palmer, 1946
See *Orthoyoldia* ? spp.
- Yoldia psammotaea orangeburgensis* Harris
See *Orthoyoldia psammotaea orangeburgensis* (Harris)
- Yoldia psammotaea* ? var. *rubamnis* Harris
See *Orthoyoldia rubamnis* (Harris)
- Yoldia psammotaea vivianensis* Harris
See *Orthoyoldia psammotaea vivianensis* (Harris)
- Yoldia* sp. Harris and Palmer, 1946
See *Orthoyoldia* spp.

AMPHINEURA

- Chiton antiquus* Conrad
See *Chiton* (*Trachyodon*) *eocenensis* Conrad

Chiton (*Trachyodon*) *eocenensis* Conrad

Chitonidae

- Chiton antiquus* Conrad, App. in Morton, 1834, p. 6 name only; d'Orbigny, 1850, p. 372; Conrad, 1856aa, p. 266; Conrad, 1865a, p. 34; Conrad, 1865d, p. 212, pl. 20, fig. 7; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 170, pl. 16, fig. 38 copy Conrad; Harris, 1895b, p. 5
- Chiton Eocenensis* Conrad, 1856a, p. 266; Conrad, 1865a, p. 34; Conrad, 1865d, p. 212, pl. 20, fig. 6; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 170, pl. 16, fig. 39 copy Conrad; Cossmann, 1893, p. 20 *eocaenensis* [sic]; Harris, 1895b, p. 19
- Chiton* (*Trachyodon*) *eocenensis* Conrad, Dall, 1892, p. 433 type species *Trachyodon*; Schuchert, et al., 1905, p. 146; Shimer and Shrock, 1944, p. 527, pl. 216, figs. 15, 16 copies Conrad, 1865d
- For preference of specific name *eocenensis* over specific name *antiquus*, first described, see Dall, 1892, p. 434

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Holotype, *Chiton antiquus* missing ANSP Moore, 1962, p.

39. Holotype, *Chiton eocenensis* missing ANSP Moore, 1962, p.

"Chiton" prostremus de Gregorio**Chitonidae**

Chiton prostremus de Gregorio, 1890, p. 170, pl. 16, figs. 40-42

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

Trachyodon eocenensis (Conrad)

See *Chiton (Trachyodon) eocenensis* Conrad

GASTROPODA (Order PTEROPODA)**Bovicornu gracile** Meyer**Cavolinidae**

Bovicornu gracile Meyer, 1887a, p. 9, pl. 2, fig. 17; Collins, 1934, p. 213, pl. 9, fig. 8 type; pl. 13, fig. 4

Meioceras eocenense (Meyer), Dall, 1892, p. 302 in part

Bovicornu eocenense [sic] (Meyer), Cossmann, 1893, p. 51 Eocene of Red Bluff

Caecum (Mioceras) gracile (Meyer), Cossmann, 1912b, p. 155

Not *Caecum (Mioceras) eocenense* [sic] (Meyer), Cossmann, 1912b, p. 155 Oligocene not Eocene

Bovicornu gracile Meyer, Harris and Palmer, 1947, p. 464, pl. 62, figs. 21, 22 copies Collins

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson (type) *vide* Collins, 1934, p. 214. Not Red Bluff as stated in Meyer, 1887a, p. 9

Type.—Holotype, No. 638880 USNM

Bovicornu eocenense [sic] (Meyer)

See *Bovicornu gracile* Meyer

Caecum—see also in Gastropoda, Part II

Caecum (Mioceras) corpulenta (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

Caecum (Mioceras) eocenense (Meyer), Cossmann, 1912b not Eocene

See under *Bovicornu gracile* Meyer

Caecum (Mioceras) gracile (Meyer)

See *Bovicornu gracile* Meyer

Cleodora (Creseis) corpulenta (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

Cleodora (Creseis) elba (de Gregorio)

See *Clio (Creseis) elba* (de Gregorio)

Cleodora (Creseis) hastata (Meyer)

See *Clio (Creseis) hastata* (Meyer)

Cleodora (Creseis) sp. cf. *hastata* (Meyer), Collins, 1934

See *Clio (Creseis)* sp.

Cleodora (Creseis) nimba de Gregorio

See *Clio (Creseis) nimba* (de Gregorio)

Cleodora (Creseis) simplex (Meyer)

See *Clio (Creseis) simplex* (Meyer)

Clio (Creseis) corpulenta (Meyer)**Cavolinidae**

Styliola corpulenta Meyer, 1887a, p. 9, pl. 2, fig. 16; Cossmann, 1893, p. 51

Meioceras eocenense (Meyer), Dall, 1892, p. 302 in part

Creseis corpulenta (Meyer), Dall, 1892, p. 430

Caccum (Mioceras) corpulenta (Meyer), Cossmann, 1912b, p. 155

Cleodora (Creseis) corpulenta (Meyer), Collins, 1934, p. 206, pl. 9, fig. 4 type; pl. 13, fig. 3

Clio (Creseis) corpulenta (Meyer), Harris and Palmer, 1947, p. 462, pl. 62, figs. 25, 26 2 views holotype

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Jackson (type)

Type.—Holotype, No. 638879 USNM

Clio (Creseis) elba (de Gregorio)**Cavolinidae**

Styliola ? elba de Gregorio, 1890, p. 16, pl. 17, figs. 53-55 *vide* Collins (not figs. 13-15 as in expl. pl.); Dall, 1892, p. 430 name only

Cleodora (Creseis) elba (de Gregorio), Collins, 1934, p. 210, pl. 12, figs. 53-55 copy De Gregorio

Range.—Eocene. Presumably Gosport sd. (type) uppermost Claiborne gr.

Locality.—Presumably ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost

Clio (Creseis) hastata (Meyer)**Cavolinidae**

Styliola hastata Meyer, 1886b, p. 78, pl. 3, fig. 11 Oligocene; de Gregorio, 1890, p. 15, pl. 17, fig. 56, fig. 57 copy Meyer as *Styliola* [*sic*]

Creseis hastata (Meyer), Dall, 1892, pp. 430, 432

Cleodora (Creseis) hastata (Meyer), Collins, 1934, p. 204, pl. 9, fig. 1; pl. 13, figs. 1, 2

Clio (Creseis) hastata (Meyer), Shimer and Shrock, 1944, p. 517, pl. 213, figs. 32-34 copies Collins; Harris and Palmer, 1947, p. 463

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr. (Collins). Oligocene (type)

Localities.—MISS.: *Hinds Co.*, near Jackson; *Clarke Co.*, Garland Cr. (Collins); *Warren Co.*, Vicksburg (type)

Type.—Holotype, No. 644595 USNM

Clio (Creseis) nimba (de Gregorio)**Cavolinidae**

Styliola ? nimba de Gregorio, 1890, p. 16, pl. 17, figs. 46-51; Dall, 1892, p. 430 name only

Cleodora (Creseis) nimba (de Gregorio), Collins, 1934, p. 209, pl. 12, figs. 46-51

Range.—Eocene. Presumably Gosport sd. (type), uppermost Claiborne gr.

Locality.—Presumably ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost

Clio (Creseis) simplex (Meyer)**Cavolinidae**

Styliola simplex Meyer, 1886b, p. 78, pl. 3, fig. 10; Cossmann, 1893, p. 51

Creseis simplex (Meyer), Dall, 1892, p. 430

Cleodora (Creseis) simplex (Meyer), Collins, 1934, p. 207, pl. 9, fig. 5 type; pl. 13, fig. 6

Clio (Creseis) simplex (Meyer), Harris and Palmer, 1947, p. 463, pl. 62, figs. 23, 24 two views holotype

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: *Hinds Co.*, Moodys Branch, Jackson (type)

Type.—Holotype, No. 638841 USNM

Clio (Creseis) sp.**Cavolinidae**

Creseis sp. Aldrich, 1895b, p. 5, pl. 1, fig. 5

Cleodora (Creseis) sp. cf. *hastata* (Meyer), Collins, 1934, p. 205, pl. 9, fig. 2

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: *Robertson Co.*, Wheelock

Type.—Figured specimen not found USNM 1963

Creseis corpulenta (Meyer)

See *Clio (Creseis) corpulenta* (Meyer)

Creseis elba (de Gregorio)

See *Clio (Creseis) elba* (de Gregorio)

Creseis hastata (Meyer)

See *Clio (Creseis) hastata* (Meyer)

Creseis nimba (de Gregorio)

See *Clio (Creseis) nimba* (de Gregorio)

Creseis simplex (Meyer)

See *Clio (Creseis) simplex* (Meyer)

Creseis sp. Aldrich, 1895b

See *Clio (Creseis)* sp.

Limacina choctavensis (Aldrich)**Limacinidae**

Physa choctavensis Aldrich, 1887, p. 83

Spirialis choctavensis (Aldrich), Aldrich, 1895b, p. 5, pl. 2, fig. 10;

Harris, 1899a, p. 103, pl. 12, fig. 24; Brann and Kent, 1960, p. 807

Limacina choctavensis (Aldrich), Collins, 1934, p. 176, pl. 7, fig. 2 type

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Choctaw Corner (type)

Types.—Syntypes, No. 638860 USNM (Aldrich, 1895b, pl. 2, fig. 10); No. 638861 (3 unfigured specimens); No. 638863 (1 unfigured specimen presumably one of Aldrich's original 5 syntypes)

Limacina elongatoidea (Aldrich)**Limacinidae**

Physa elongatoidea Aldrich, 1887, p. 83

Spirialis elongatoidea (Aldrich), Aldrich, 1895b, p. 5, pl. 2, fig. 9;

Harris, 1899a, p. 103, pl. 12, fig. 25 holotype

Limacina elongatoides [sic] (Aldrich), Collins, 1934, p. 177, pl. 7, fig. 1 type

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Choctaw Corner (type)

Type.—Holotype, No. 638862 USNM

Meioceras—see also in Gastropoda, Part II

Meioceras eocenense (Meyer), Dall, 1892 in part

See *Bovicornu gracile* Meyer

See also *Clio* (*Creseis*) *corpulenta* (Meyer)

Mioceras

See *Meioceras*

Mioceras corpulenta Meyer

See *Clio* (*Creseis*) *corpulenta* (Meyer)

Mioceras eocaenense (Meyer)

See *Bovicornu gracile* Meyer

Mioceras gracile (Meyer)

See *Bovicornu gracile* Meyer

Physa—see also in Gastropoda, Part II

Physa choctavensis Aldrich

See *Limacina choctavensis* (Aldrich)

Physa elongatoidea Aldrich

See *Limacina elongatoidea* (Aldrich)

Spirialis choctavensis (Aldrich)

See *Limacina choctavensis* (Aldrich)

Spirialis elongatoidea (Aldrich)

See *Limacina elongatoidea* (Aldrich)

Spiratella augustana Gardner

Limacinidae

Spiratella augustana Gardner, 1951, p. 10, fig. 2

Range.—Middle Eocene. Tallahatta fm. (type), lower Claiborne gr.

Locality.—ALA.: Clarke Co., between 15-20 ft. below contact of Tallahatta and Lisbon fms. and 4 ft. above stream bed of Little Stave Cr., $4\frac{1}{2}$ mi. N. of Jackson (type)

Type.—Holotype, No. 560589 USNM

Styliola corpulenta Meyer

See *Clio* (*Creseis*) *corpulenta* (Meyer)

Styliola ? *elba* de Gregorio

See *Clio* (*Creseis*) *elba* (de Gregorio)

Styliola hastata Meyer

See *Clio* (*Creseis*) *hastata* (Meyer)

Styliola ? *nimba* de Gregorio

See *Clio* (*Creseis*) *nimba* (de Gregorio)

Styliola simplex Meyer

See *Clio* (*Creseis*) *simplex* (Meyer)

Tibiella marshi Meyer**Cavolinidae**

Tibiella Marshi Meyer, 1884, p. 110, text fig.; Dall, 1892, p. 432; Collins, 1934, p. 226, pl. 14, fig. 1 type
 ? *Tibiella marshalli* [sic], Meyer, Zilch, 1959, p. 49, fig. 165 error for *marshi*

Range.—Middle Eocene. Gosport sd (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Not in Aldrich Coll. USNM *fide* Wilson, 1963 (pers. com.)

"Tibiella" texana Collins**Cavolinidae**

"Tibiella" texana Collins, 1934, p. 227, pl. 14, figs. 2-5

Range.—Middle Eocene. Weches fm. (type), middle Claiborne gr.

Locality.—TEXAS: Bastrop Co., Smithville, Colorado R. (type)

Type.—Holotype, No. 644568 USNM

SCAPHOPODA

Antalis arciforme (Conrad)

See *Dentalium* (*Antalis*) *arciforme* Conrad

Antalis blandum de Gregorio

See *Dentalium* (*Antalis*) *blandum* de Gregorio

Antalis danvillense Palmer

See *Dentalium* (*Antalis*) *danvillense* Palmer

Antalis minutistriatum (Gabb)

See *Dentalium* (*Antalis*) *minutistriatum* Gabb

Antalis mississippiense jacksonense Palmer

See *Dentalium* (*Antalis*) *mississippiense jacksonense* Palmer

Antalis thalloides (Conrad)

See *Dentalium* (*Antalis*) *thalloides* Conrad

Antalis thalloides claibornense Palmer

See *Dentalium* (*Antalis*) *thalloides claibornense* Palmer

Antalis vincense Palmer

See *Dentalium* (*Antalis*) *vincense* Palmer

Cadulus (Dischides) abruptus Meyer and Aldrich**Siphonodentaliidae**

Cadulus abruptus Meyer and Aldrich, 1886, p. 40, pl. 2, figs. 2; Dall, 1892, p. 444 in part; Aldrich, 1895b, p. 4 in part, not pl. 1, figs. 1, 2 [labelled *C. subcoarctatus* Gabb var.] (= *Cadulus* sp.); Pilsbry and Sharp, 1898, p. 235 [erroneous age given]; Harris, 1899a, p. 5 in part not, pl. 1, fig. 3 (= *Cadulus* sp.); Clark and Martin, 1901, p. 159 in part, not pl. 29, fig. 9 (= *C. bellulus* Clark); Shimer and Shrock, 1944, p. 523 in part, not pl. 214, fig. 29 copy Clark and Martin (= *C. bellulus*); not Brann and Kent, 1960, p. 147 (= *Cadulus* sp.)

Cadulus ("Dischides") *abruptus* Meyer and Aldrich, Palmer, 1937, p. 25 in part, pl. 2, figs. 15, 16, 23-25; Le Blanc, 1942+, p. 79 in part, not pl. 12, fig. 1; Brann and Kent, 1960, p. 147

Range.—Lower Eocene. Sabinetown fm., upper Wilcox [Sabine] gr. (Le Blanc). Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Newton Co., Newton (type); Indian Mound, 3 mi. E. of Newton; Hickory; Clarke Co., Wautubbee. ALA.: Monroe Co., Lisbon Ldg., Alabama R. TEXAS: Sabine Co., bluff $\frac{1}{4}$ mi. downstream from Sabinetown Ferry ldg. (Le Blanc)

Type.—Holotype, No. 638725 USNM

Cadulus abruptus Meyer and Aldrich, Clark and Martin, 1901 in part.
Not Meyer and Aldrich, 1886
See *Cadulus bellulus* Clark

Cadulus abruptus Meyer and Aldrich, Clark and Martin, 1901 in part.
Not Meyer and Aldrich, 1886
See *Cadulus* sp.

Cadulus abruptus Meyer and Aldrich, Harris, 1899a. Not Meyer and Aldrich, 1886
See *Cadulus* sp.

***Cadulus aldrichi* Gardner**

Siphonodentaliidae

Not *Cadulus subcoarctatus* [sic] Gabb, Aldrich, 1895b, p. 4 as in Gardner, 1935, p. 200

Not *Cadulus abruptus* Meyer and Aldrich, Harris, 1899a, p. 5 as in Gardner, 1935, p. 200

Cadulus aldrichi Gardner, 1935, p. 200, pl. 20, fig. 1

Range.—Paleocene. Wills Point fm. (type), upper Midway gr.

Localities.—TEXAS: Bexar Co., USGS Sta. No. 8245, Salado Creek, 5.3 mi. SE. of San Antonio (type); Bastrop Co., 3 mi. SW. of Cedar Creek P.O.

Type.—Holotype, No. 373066 USNM

***Cadulus bellulus* Clark**

Siphonodentaliidae

Cadulus bellulus Clark, 1895, p. 5; Clark, 1896, p. 72, pl. 14, fig. 6; Pilsbry and Sharp, 1898, p. 235

Cadulus abruptus Meyer and Aldrich, Clark and Martin, 1901, p. 159, pl. 29, fig. 9; Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 29 copy Clark and Martin. Not *C. abruptus* Meyer and Aldrich, 1886, p. 40

Range.—Lower Eocene. Nanjemoy fm. (type)

Localities.—VA.: King George Co., Woodstock (type). MD.: Charles Co., head of Nanjemoy Cr.; E. and W. of Port Tobacco; $1\frac{1}{2}$ and $2\frac{1}{2}$ mi. above Popes Cr.; Prince Georges Co., 1 mi. SE. of Piscataway; Upper Marlboro (deep cut near Chesapeake Beach R. R. station); Calvert Co., well at Chesapeake Beach

Type.—Holotype, USNM

Cadulus compressus Meyer, 1885, p. 463 Jackson; Dall, 1892, p. 444 is a *nomen nudum*

***Cadulus depressus* Meyer**

Siphonodentaliidae

Cadulus depressus Meyer, 1884, p. 111 text fig.; Dall, 1892, p. 444; Pilsbry and Sharp, 1898, p. 236; Aldrich, 1895b, p. 4; Palmer, 1937, p. 26, pl. 2, fig. 17 copy Meyer

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638695 USNM

Cadulus (Polyschides) jacksonensis Meyer

Siphonodentaliidae

Cadulus jacksonensis Meyer, 1885a, p. 462; Meyer, 1886b, p. 65, pl. 3, figs. 8, 8a, 8b; Dall, 1892, p. 444; Aldrich, 1895b, p. 4 under *newtonensis*

Cadulus newtonensis Meyer and Aldrich, Dall, 1892, p. 444 in part; Pilsbry and Sharp, 1898, p. 237 (*Polyschides*) in part

Siphonodentalium ? *jacksonense* (Meyer), Cossmann, 1893, p. 20

Cf. *Cadulus jacksonensis* Meyer, Harris, 1894b, p. 157

Cadulus (Polyschides) jacksonensis Meyer, Harris and Palmer, 1947, p. 216, pl. 26, figs. 1-6

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson (type)

Types.—Syntypes (2), No. 638704 USNM

Cadulus juvenis Meyer

Siphonodentaliidae

Cadulus juvenis Meyer, 1886b, p. 66, pl. 3, fig. 4; Dall, 1892, p. 444; Aldrich, 1895b, p. 4; Pilsbry and Sharp, 1898, p. 237

Gadus juvenis (Meyer), Cossmann, 1893, p. 20

Cf. *Cadulus juvenis* Meyer, Harris, 1894b, p. 157

Cadulus (Cadulus) juvenis Meyer, Harris and Palmer, 1947, p. 216, pl. 26, fig. 14 copy Meyer

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson (type)

Type.—Holotype, No. 638814 USNM

Cadulus (Polyschides) newtonensis Meyer and Aldrich

Siphonodentaliidae

Cadulus newtonensis Meyer and Aldrich, 1886, p. 40, pl. 2, figs. 3, 3a, 3b as *Cadulus* sp.; Dall, 1892, p. 444 in part; Aldrich, 1895b, p. 4

Cadulus (Polyschides) newtonensis Meyer and Aldrich, Pilsbry and Sharp, 1898, p. 237 in part [age of Newton and Jackson, Miss., erroneous]; Palmer, 1937, p. 22, pl. 2, figs. 39, 40 copies Meyer and Aldrich

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—MISS.: Newton Co., Newton (type); Clarke Co., Wautubbee

Types.—Syntypes (2), No. 638727 USNM

Cadulus newtonensis Meyer and Aldrich, Dall, 1892. Not Meyer and Aldrich, 1886

See also *Cadulus (Polyschides) jacksonensis* Meyer

Cadulus (Cadulus) ouachitensis Palmer

Siphonodentaliidae

Cadulus (Cadulus) ouachitensis Palmer, 1937, p. 21, pl. 2, figs. 18, 19; Brann and Kent, 1960, p. 148

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: Ouachita Par., Lapiniere Ldg., Ouachita R. (type). TEXAS: Sabine Co., Columbus

Types.—Syntypes, Nos. 2644, 2645 PRI

Cadulus (Polyschides) margarita Palmer**Siphonodentaliidae**

Cadulus (Polyschides) quadriturritus Meyer, Palmer, 1937, p. 24 in part Jackson Eocene. Not Meyer, 1886b, p. 65 Oligocene

Cadulus (Polyschides) margarita Palmer in Harris and Palmer, 1947, p. 217, pl. 26, figs. 8-11; Brann and Kent, 1960, p. 148

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Moodys Branch (type), Jackson; *Caldwell Par.*, Gibson Ldg., Ouachita R. TEXAS: *Sabine Co.*, 1 mi. below Robinsons Ferry, Sabine R.; Sabine R. opposite center sec. 6, T. 3 N., R. 12 W., Sabine Par., La. Outcrop 30 (Veatch, 1902, pp. 131, 132)

Types.—Holotype, No. 4483; paratype, No. 4484 PRI

Cadulus phoenicea Gardner**Siphonodentaliidae**

Cadulus phoenicea Gardner, 1935, p. 199, pl. 20, fig. 2

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.

Locality.—TEXAS: *Bastrop Co.*, USGS Sta. 5282, clay from bluff at Webberville (type)

Type.—Holotype, No. 370996 USNM

Cadulus quadriturritus Meyer, Palmer, 1937

See *Cadulus (Polyschides) margarita* Palmer (Jackson Eocene)

See also *Cadulus* sp. (Claiborne Eocene)

Cadulus (Dischides) subcoarctatus (Gabb)**Siphonodentaliidae**

Ditrupa subcoarctata Gabb, 1860d, p. 386, pl. 67, fig. 47

Gadus subcoarctatus [sic] (Gabb), Conrad, 1866a, p. 10

Cadulus subcoarctatus [sic] (Gabb), Dall, 1892, p. 444; Aldrich, 1895b, p. 4

Cadulus subcoarctatus (Gabb), Pilsbry and Sharp, 1898, p. 238

Cadulus (Dischides) subcoarctatus (Gabb), Palmer, 1937, p. 24, pl. 2, fig. 26; pl. 78, fig. 1 holotype; Brann and Kent, 1960, p. 148

Range.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.

Localities.—TEXAS: *Robertson Co.*, Town Branch of Cedar Creek near Wheelock (type) (*fide* Stenzel, Krause, and Twining, 1957, p. 11); *Burleson Co.*, Stone City Bluff, Brazos R.; *Bastrop Co.*, Little Brazos R., 2½ mi. above Stone City. *Sabine Co.*, Columbus, Sabine R.; Sabine R. opposite SW. corner SE. ¼ sec. 35, T. 5 N., R. 13 W. Sabine Par., La. Outcrop 21 (Veatch, 1902, p. 129)

Type.—Holotype, No. 13263 ANSP

Cadulus subcoarctatus [sic] (Gabb) var. Aldrich, 1895b

See *Cadulus* spp.

See also under *Cadulus aldrichi* Gardner

Cadulus turgidus Meyer**Siphonodentaliidae**

Cadulus turgidus Meyer, 1886b, p. 65, pl. 1, fig. 10; Dall, 1892, p. 444; Aldrich, 1895b, p. 5; Harris, 1896, p. 73, pl. 7, fig. 2; Pilsbry and Sharp, 1898, p. 239; Gardner, 1935, p. 199; Shimer and Shrock, 1944, p. 523, pl. 214, fig. 26 copy Harris; Brann and Kent, 1960, p. 148

Siphonodentalium (Cadulus ?) turgidus Meyer, de Gregorio, 1890, p. 173, pl. 17, fig. 44 copy Meyer

Range.—Paleocene. Matthews Ldg. beds (type), uppermost Porters Cr. fm., upper Midway gr.

Localities.—ALA.: Wilcox Co., Matthews Ldg., Tombigbee R. (type); 1 mi. W. of Oak Hill; Dales Branch. TEXAS: *Bastrop Co.*, USGS Stas. 11696 and 11914, Colorado R., 4 mi. below Webberville; USGS Sta. 11890, Colorado R., 2 mi. below Travis Co. line (Gardner)

Type.—Holotype, No. 638813 USNM

Cadulus (Polyschides) turritus (I. Lea)

Siphonodentaliidae

Dentalium turritum I. Lea, 1833, p. 35, pl. 1, fig. 3; H. C. Lea, 1849, p. 99; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; de Gregorio, 1890, p. 172 in part, pl. 17, cf. figs. 35, 36; figs. 39, 40 copies Lea; Cossmann, 1893, p. 19 in part; Harris, 1895b, p. 46

Cadulus turritus (I. Lea), Dall, 1892, p. 444; Aldrich, 1895b, p. 4
Cadulus (Polyschides) turritus (I. Lea), Pilsbry and Sharp, 1898, p. 239; Palmer, 1937, p. 22, pl. 78, fig. 2 holotype

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 5015 ANSP

Cadulus sp., Meyer and Aldrich, 1886

See *Cadulus newtonensis* Meyer and Aldrich

Cadulus sp.

Siphonodentaliidae

Cadulus quadriturritus Meyer, Palmer, 1937, p. 23 in part, pl. 2, figs. 13, 14; not Meyer, 1886b Oligocene

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: Ouachita Par., Lapiniere Ldg., E. bank Ouachita R.

Type.—Figured specimen, No. 2646 PRI

Cadulus sp.

Siphonodentaliidae

Dentalium gnizum de Gregorio, 1890, p. 173, pl. 17, figs. 42, 43; Pilsbry and Sharp, 1898, p. 205 suggested a *Cadulus*; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Palmer, 1937, p. 27

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

Cadulus sp.

Siphonodentaliidae

Cadulus sp. Vaughan, 1896, p. 51

Range.—Upper Eocene. Jackson gr.

Locality.—LA.: Catahoula Par., 2 mi. N. of Rosefield

Type.—Unfigured specimen, presumably USNM

Cadulus sp.

Siphonodentaliidae

Cadulus subcoarctatus [sic] Gabb "var." Aldrich, 1895 b, p. 4, pl. 1, figs. 1, 2. Not Gabb, 1860d, p. 386

Range.—Lower Eocene. Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Greggs Ldg., Alabama R.

Type.—Figured specimen (fig. 2), No. 638923 USNM

Cadulus sp.**Siphonodentaliidae**

Cadulus subcoarctatus [sic] Gabb "var." Aldrich, 1895b, p. 4, pl. 1, fig. 4. Not Gabb, 1860d, p. 386

Cadulus abruptus Meyer and Aldrich, Harris, 1899a, p. 5 in part, pl. 1, fig. 3; Le Blanc, 1942+, p. 79, pl. 12, fig. 1; Brann and Kent, 1960, p. 147 No. 303 only. Not Meyer and Aldrich, 1886, p. 40

Range.—Lower Eocene. Bashi mem, Hatchetigbee fm., upper Wilcox [Sabine] gr.; Sabinetown fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.; 1½ mi. WSW. Choctaw Corner; *Monroe Co.*, 4 mi. below Hamilton Bluff, Alabama R. TEXAS: *Sabine Co.*, bluff ¼ mi. downstream Sabinetown Ferry Ldg., Sabine R.

Types.—Figured specimen, not USNM; figured specimens, No. 303 PRI (Harris); No. 6047 LSU Pal. Mus. (LeBlanc)

Cadulus sp.**Siphonodentaliidae**

Cadulus abruptus Meyer and Aldrich, Clark and Martin, 1901, pp. 159, 160 in part. Not Meyer and Aldrich, 1886, p. 40

Cadulus bellulus Clark, Clark and Martin, 1901, pp. 159, 160. Not Clark, 1895 nor Clark, 1896.

Range.—Paleocene. Aquia fm.

Localities.—VA.: *Stafford Co.*, Aquia Cr. MD.: *Charles Co.*; Liverpool Point; Clifton Beach; *Prince Georges Co.*, 1 mi. NE. of Piscataway

Types.—Unfigured specimens, USNM

Dentalium alternatum I. Lea

See *Dentalium (Antalis) thalloides* Conrad

Dentalium annulatum Meyer**Dentaliidae**

Dentalium annulatum Meyer, 1886b, p. 64, pl. 1, fig. 1; de Gregorio, 1890, p. 173, pl. 17, fig. 45 copy Meyer; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 198. Not *D. annulatum* Gmelin, 1791, p. 3738 [not 1788 as in Palmer, 1937]; not *D. annulatum* Sandberger, 1842, p. 399 *nomen nudum*; not *Entalis annulatum* Tate, 1887, p. 191; not *Entaliopsis annulata* Newton and Harris, 1894, p. 67

Dentalium "annulatum" Meyer, Palmer, 1937, p. 19, pl. 2, fig. 37 copy Meyer

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 638812 USNM

Dentalium (Antalis) arciforme Conrad**Dentaliidae**

Dentalium arciforme Conrad, 1846b, p. 212, pl. 1[2], fig. 3; H. C. Lea, 1849, p. 99; Dall, 1892, p. 438; Pilsbry and Sharp, 1898, p. 199

Dentalium leai Meyer, 1885a, p. 462; Meyer, 1886b, p. 63, pl. 1, figs. 2, 2a

Dentalium turritum Lea, de Gregorio, 1890, p. 172 in part, pl. 17, figs. 37, 38 copy *Leai* Meyer; fig. 41 copy *arciforme* Conrad

Dentalium (Antalis) arciforme Conrad, Palmer, 1937, p. 16, pl. 1, figs. 12-14; fig. 15 copy Conrad; Brann and Kent, 1960, p. 316

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Missing ANSP *vide* Palmer, 1937, p. 16; verified Moore, 1962, p. 39. Holotype *D. Leai* Meyer, No. 638702 USNM

Dentalium asgum de Gregorio and var. *tirpum* de Gregorio
See *Dentalium (Antalis) thalloides* Conrad

Dentalium bi-formis Tuomey, 1858, pp. 265, 269 *nomen nudum*

Dentalium bimixtum de Gregorio
See *Dentalium (Antalis) thalloides* Conrad

"Dentalium bitubatum" Meyer

Dentaliidae

Dentalium bitubatum Meyer, 1886b, p. 64, pl. 3, fig. 1; Dall, 1892, p. 438; Cossmann, 1893, p. 20; Pilsbry and Sharp, 1898, p. 200

"*Dentalium bitubatum*" Meyer, Harris and Palmer, 1947, p. 215, pl. 26, fig. 7 copy Meyer

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Locality.—MISS.: Hinds Co., Jackson (type)

Type.—Holotype, No. 638811 USNM

Dentalium (Antalis) blandum de Gregorio

Dentaliidae

Dentalium blandum de Gregorio, 1890, p. 172, pl. 17, figs. 26-31; Dall, 1892, p. 438; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 200

Dentalium (Antalis) blandum de Gregorio, Palmer, 1937, pp. 15, 18, pl. 1, figs. 9, 10; Brann and Kent, 1960, pp. 316, 317

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Formerly De Gregorio Coll., Univ. of Palermo, Palermo, Sicily. Lost

Dentalium Danai Meyer

See *Fustiaria (Laevidentalium) danai* (Meyer)

Dentalium (Antalis) danvillense Palmer

Dentaliidae

Dentalium (Antalis) danvillense Palmer in Harris and Palmer, 1947, p. 210, pl. 26, figs. 23-27; Brann and Kent, 1960, pp. 317, 318

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.; Danville Ldg. beds (type), uppermost Jackson gr.

Localities.—LA.: Catahoula Par., Danville Ldg., Ouachita R. (type); Carters Ldg., Ouachita R. MISS.: Hinds Co., Town Creek, Jackson

Types.—Holotype, No. 4472; paratypes, Nos. 4473-4476 PRI

Dentalium densatum Conrad

Dentaliidae

Dentalium densatum Conrad, 1865d, p. 212, pl. 20, fig. 15; Palmer, 1937, p. 14, pl. 1, fig. 3 copy Conrad

Range.—Not known.

Locality.—Not indicated by Conrad, 1865

Type.—Holotype, missing ANSP, Moore, 1962, p. 54. Present Palmer, 1937, p. 15

Dentalium eugenii Dall**Dentaliidae**

Dentalium eugenii Dall, 1892, pp. 438, 442; Pilsbry and Sharp, 1898, p. 203

Range.—Paleocene. Midway gr. (type)

Locality.—ALA.: Wilcox Co., Prairie Creek (type)

Type.—Holotype, No. 112631 USNM

Dentalium gnizum de Gregorio

See *Cadulus* sp.

Dentalium incisissimum Meyer and Aldrich**Dentaliidae**

Dentalium incisissimum Meyer and Aldrich, 1886, p. 40, pl. 2, fig. 1; Dall, 1892, p. 439; Pilsbry and Sharp, 1898, p. 206; Palmer, 1937, p. 19, pl. 1, fig. 4 as *Dentalium* sp., fig. 6 copy Meyer and Aldrich; Brann and Kent, 1960, p. 318

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., Wautubbee (type)

Type.—Holotype, No. 638724 USNM

Dentalium leai Meyer

See *Dentalium* (*Antalis*) *arciforme* Conrad

Dentalium mediaviense Harris**Dentaliidae**

Dentalium minutistriatum Dall, 1892, p. 438 in part. Not Gabb, 1860d, p. 386

Dentalium mediaviense Harris, 1896, p. 73, pl. 7, figs. 1, 1a; Pilsbry and Sharp, 1898, p. 209; Gardner, 1935, p. 197; Brann and Kent, 1960, p. 319

Dentalium (*Graptacme*) *mediaviense* Harris, Shimer and Shrock, 1944, p. 523, pl. 214, figs. 24, 25 copies Harris, 1896

Range.—Paleocene. Lower Midway gr.; upper Midway gr. (type)

Localities.—MISS.: Tippah Co., $\frac{1}{2}$ mi. N. of Ripley. ALA.: Wilcox Co., $\frac{1}{2}$ mi. W. of Graveyard Hill (type); ? Dales Branch; 1 mi. N. of Allenton; Sumter Co., Black Bluff. TEXAS; See Gardner, 1935, p. 198 localities

Types.—Syntypes, No. 82 missing prior to 1954 PRI; No. 2349 PRI

Dentalium microstria Heilprin**Dentaliidae**

Dentalium microstria Heilprin, 1881, p. 375, pl. 20, fig. 3; Aldrich, 1895b, p. 3, pl. 1, fig. 6; Harris, 1899a, p. 3, pl. 1, figs. 1, 1a; Palmer, 1937, p. 19, pl. 2, figs. 42, 43

Dentalium microstria Heilprin, Aldrich, 1886, p. 52; de Gregorio, 1890, p. 173; Pilsbry and Sharp, 1898, p. 209; Brann and Kent, 1960, p. 319

Not *Dentalium* cf. *microstria* Heilprin, Sutton, 1946, p. 1681

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Localities.—ALA.: Clarke Co., Cave Branch tributary of Bashi Creek (type); Woods Bluff, Tombigbee R.; Choctaw Corner; Monroe Co., 4 mi. N. of Hamilton; Wilcox Co., Bethel; Washington Co., Hatchetigbee Bluff, Tombigbee R.; Choctaw Co., 4 mi. S. of Mount Sterling, Butler; $\frac{1}{2}$ mi. S. of Butler

Type.—Holotype, No. 20 GSATC

Dentalium (Antalis) minutistriatum Gabb**Dentaliidae**

Dentalium minutistriatum Gabb, 1860d, p. 386, pl. 67, fig. 46; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; Heilprin, 1891a, p. 401; Dall, 1892, p. 438 in part; Pilsbry and Sharp, 1898, p. 209; Clark and Martin, 1901, p. 158 in part, not pl. 29, fig. 7 (= *Dentalium* sp.); Deussen, 1924, p. 67, pl. 22, fig. 5; Trowbridge, 1932, pl. 42, fig. 10 copy Deussen

Cf. *Dentalium minutistriatum* Gabb ?, Cossmann, 1893, p. 19, pl. 1, fig. 22 [*minustistriatum* sic]

Dentalium (Antalis) minutistriatum Gabb, Palmer, 1937, p. 17, pl. 2, figs. 33-36, 38, 41; Harris and Palmer, 1947, p. 210, pl. 26, fig. 28; Brann and Kent, 1960, pp. 319, 320

Dentalium (Graptacme) minutistriatum Gabb, Shimer and Shrock, 1944, p. 523, in part, pl. 214, fig. 13 copy Deussen, not fig. 12 (= *Dentalium* sp.)

Range.—Middle Eocene. Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.; McBean fm., upper Claiborne gr.; Gosport sd., uppermost Claiborne gr. Upper Eocene, lower Jackson gr. ?
Localities.—TEXAS: *Robertson Co.*, Town Branch of Cedar Creek near Wheelock (type). ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. S.C.: *Orangeburg Co.*, 3 mi. WNW. Orangeburg. ? LA.: *Grant Par.*, Montgomery, Red R. for complete list of localities in Texas, La., Miss., and Ala. see Palmer, 1937, p. 17
Type.—Holotype, No. 13264 ANSP [broken]

Dentalium minutistriatum Gabb, Clark and Martin, 1901. Not Gabb, 1860d
 See *Dentalium* sp.

Dentalium minutistriatum Gabb, Dall, 1892 in part. Not Gabb, 1860d
 See *Dentalium mediaviense* Harris

Dentalium minutistriatum dumblei new var. Harris in Kennedy, 1895, pp. 97, 114, 123, 126, 128, 130=*nomen nudum*. Harris proposed name in his Texas Eocene MS., but name was not published. *Fide* Palmer, 1937, p. 21

Dentalium mississippiensis Conrad, Clark and Martin, 1901. Not Conrad, 1848a
 See *Dentalium* sp.

Dentalium (Antalis) mississippiense jacksonense Palmer**Dentaliidae**

Dentalium (Antalis) mississippiense jacksonense Palmer in Harris and Palmer, 1947, p. 212, pl. 26, figs. 20-22; Brann and Kent, 1960, p. 320

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.; Yazoo cl., upper Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type); Moodys Branch; Town Cr.; *Caldwell Par.*, Bunker Hill, Ouachita R.; Gibson Ldg., Ouachita R. TEXAS: *Sabine Co.*, 1 mi. below Robinson's Ferry, Sabine R. ALA.: *Clarke Co.*, Garland Cr., near Shubuta. LA.: *Grant Par.*, Montgomery, Red R.

Types.—Holotype, No. 4477; paratypes, Nos. 4478, 4479 PRI

Dentalium multannulatum Aldrich**Dentaliidae**

Dentalium multannulatum Aldrich, 1895b, p. 3, pl. 1, fig. 3; Pilsbry and Sharp, 1898, p. 210; Harris, 1899a, p. 4, pl. 1, fig. 2 holotype

Range.—Lower Eocene. Greggs Ldg. mem. (type), Tuscahoma fm., middle Wilcox [Sabine] gr.

Locality.—ALA.: Monroe Co., Greggs Ldg., Alabama R. (type)

Type.—Holotype, No. 638920 USNM

Dentalium multistriatum Heilprin in Aldrich, 1886, p. 46; de Gregorio, 1890, p. 173; Palmer, 1937, p. 20 is a *nomen nudum*

Dentalium subcompressum Meyer

See *Fustiaria* (*Laevidentalium*) *subcompressa* (Meyer)

Dentalium sylvaerupis (Harris)

Dentaliidae

Serpulorbis sylvaerupis Harris, 1899a, p. 73, pl. 10, fig. 1; Brann and Kent, 1960, p. 793

Range.—Lower Eocene. Bashi mem. (type), Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: Clarke Co., Woods Bluff, Tombigbee R. (type)

Type.—Holotype, No. 268 PRI

Dentalium (Antalis) thalloides Conrad

Dentaliidae

Dentalium thalloides Conrad, 1833b, p. 34, not pl. 18, fig. 1 as in text (Harris reprint, 1893, p. 56); Conrad, App. in Morton, 1834, p. 8; Conrad, 1835a, p. 39, pl. 15, fig. 10 (Harris reprint, 1893, p. 95, pl. 15, fig. 10); Conrad, 1846b, p. 211, pl. 1 [2], fig. 2; Bronn, 1848a, p. 416; H. C. Lea, 1849, p. 99; d'Orbigny, 1850, p. 373; Tuomey, 1858, pp. 265, 274; Conrad, 1865a, p. 34; Conrad, 1866a, p. 10; Aldrich, 1886, pp. 44, 46; de Gregorio, 1890, p. 171, pl. 17, figs. 15-17, fig. 18 copy Conrad, fig. 21a copy Conrad, fig. 21b, copy *D. alternatum* I. Lea; Dall, 1892, p. 438 in part; Cossmann, 1893, p. 19; Harris, 1895b, p. 45; Pilsbry and Sharp, 1898, p. 218; Harris, 1899a, p. 4

Dentalium alternatum I. Lea, 1833, p. 34, pl. 1, fig. 2; Conrad, App. in Morton, 1834, p. 8; H. C. Lea, 1849, p. 99; Harris, 1895b, p. 4 (= *D. thalloides* Conrad)

Dentalium asgum de Gregorio, 1890, p. 171, pl. 17, figs. 22-24; var. *tirpum* de Gregorio, 1890, p. 172, pl. 17, figs. 25a, b

Dentalium bimixtum de Gregorio, 1890, p. 172, pl. 17, figs. 32-34

Dentalium (Antalis) thalloides Conrad, Palmer, 1937, p. 12, pl. 1, figs. 16, 18-26; Brann and Kent, 1960, pp. 321, 322

Dentalium thalloide Conrad, Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 17 copy Conrad

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Types.—Lectotype *Dentalium thalloides* Conrad, Palmer, 1937, p. 14; type missing ANSP, Moore, 1962, p. 102. Holotype *D. alternatum* I. Lea, No. 5005 ANSP ? Holotype *D. asgum* and var. *tirpum* de Gregorio, formerly de Gregorio Coll., Univ. Palermo, Palermo, Sicily. Lost

Dentalium (Antalis) thalloides claibornense Palmer

Dentaliidae

Dentalium (Antalis) thalloides claibornense Palmer, 1937, p. 14, pl. 1, figs. 1, 2, 5; Brann and Kent, 1960, p. 322

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.; Gosport sd. (type), uppermost Claiborne gr.
Localities.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type). MISS.: Clarke Co., Wautubbee
Types.—Syntypes, Nos. 2626, 2627 PRI

Dentalium turritum I. Lea
 See *Cadulus turritus* (I. Lea)

Dentalium turritum I. Lea, de Gregorio, 1890
 See *Cadulus turritus* (I. Lea)
 See also *Dentalium (Antalis) arciforme* Conrad
 See also *Fustiaria (Laevidentalium) danai* Meyer

Dentalium (Antalis) vincense Palmer

Dentaliidae

Dentalium (Antalis) vincense Palmer in Harris and Palmer, 1947, p. 209, pl. 26, figs. 29-31; Wilbert, 1953, p. 98; Brann and Kent, 1960, p. 322

Range.—Upper Eocene. Lower Jackson gr. (type)
Localities.—ARK.: Cleveland Co., Vince Ferry, Saline R. (type); Jefferson Co., White Bluff, W. bank Arkansas R.
Types.—Holotype, No. 4468 PRI; paratypes, Nos. 4469-4470 PRI

Dentalium sp.

Dentaliidae

Dentalium minutistriatum Gabb, Clark and Martin, 1901, p. 158 in part, pl. 29, fig. 7; Shimer and Shrock, 1944, p. 523 in part, pl. 214, fig. 12 copy Clark and Martin, in subgenus *Graptacme*. Not Gabb, 1860d, p. 386

Range.—Lower Eocene. Nanjemoy fm.
Locality.—MD.: Charles Co., Popes Cr.
Type.—Figured specimen, USNM

Dentalium sp., Palmer, 1937 in part
 See *Dentalium incisissimum* Meyer and Aldrich

Dentalium sp.

Dentaliidae

Dentalium mississippiensis Conrad, Clark and Martin, 1901, p. 159, pl. 29, fig. 8. Not Conrad, 1848a, p. 282

Range.—Paleocene. Aquia fm., Lower Eocene. Nanjemoy fm.,
Localities.—MD.: Prince Georges Co., Upper Marlboro (1 mi. NE. Piscataway; Charles Co., W. of Port Tobacco
Type.—Figured specimen, USNM (Upper Marlboro, Aquia fm.)

Dentalium sp.

Dentaliidae

Dentalium sp. Palmer, 1937, p. 18, pl. 1, fig. 8; Brann and Kent, 1960, p. 321

Range.—Middle Eocene. Stone City beds, middle Claiborne gr.
Locality.—TEXAS: Sabine Co., Sabine R., Texas side opposite SW. corner SE. $\frac{1}{4}$ sec. 35, T. 5 N., R. 13 W., Sabine Par., La. Outcrop 21, (Veatch, 1902, p. 129)
Type.—Figured specimen, No. 2639 PRI

Dentalium sp.**Dentaliidae**

Dentalium sp., Palmer, 1937, p. 18, pl. 1, fig. 11; Brann and Kent, 1960, p. 321

Range.—Middle Eocene. Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: *Ouachita Par.*, Lapiniere Ldg., E. bank Ouachita R.

Type.—Figured specimen, No. 2640 PRI

Dentalium sp.**Dentaliidae**

Dentalium sp. Harris and Palmer, 1947, p. 213, pl. 26, fig. 19; Brann and Kent, 1960, p. 321

Range.—Upper Eocene. Moodys Branch fm., lower Jackson gr.

Locality.—ALA.: *Washington Co.*, St. Stephens Bluff, Tombigbee R. ARK.: *Cleveland Co.*, Vince Ferry, Saline R. Not ½ mi. W of

Graveyard Hill, Ala., as in Brann and Kent, 1960, p. 321

Type.—Figured specimen, No. 4480 PRI

"*Dischides*" *abruptus* (Meyer and Aldrich)

See *Cadulus* (*Dischides*) *abruptus* (Meyer and Aldrich)

Dischides subcoarctuata (Gabb)

See *Cadulus* (*Dischides*) *subcoarctuatus* (Gabb)

Ditrupa subcoarctuata Gabb

See *Cadulus* (*Dischides*) *subcoarctuatus* (Gabb)

Fustiaria (Laevidentalium) danai (Meyer)**Dentaliidae**

Dentalium danai Meyer, 1885a, p. 462; Meyer, 1886b, p. 64, pl. 3, figs. 2, 2a; de Gregorio, 1890, p. 172 under *D. turritum* I. Lea; Dall, 1892, pp. 438, 439 in part; Cossmann, 1893, p. 19 *Laevidentalium*; Pilsbry and Sharp, 1898, p. 202

Not *Dentalium danai* Martin, 1904, p. 272 Miocene

Dentalium (*Laevidentalium*) cf. *danai* Meyer, Harris and Palmer, 1947, p. 213, pl. 26, figs. 12, 13 copies Meyer; fig. 18 *D.* cf. *danai*; Brann and Kent, 1960, p. 317

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr.

Localities.—MISS.: *Hinds Co.*, Jackson (type). LA.: *Grant Par.*, Montgomery Ldg., Red R.

Type.—Holotype, No. 638703 USNM

Fustiaria (Laevidentalium) subcompressa (Meyer)**Dentaliidae**

Dentalium subcompressum Meyer, 1885a, p. 462; Meyer, 1886b, p. 64, pl. 3, figs. 3, 3a; Meyer, 1887b, p. 54, pl. 3, figs. 13, 13a; Dall, 1892, p. 439; Cossmann, 1893, p. 19; Pilsbry and Sharp, 1898, p. 216

Dentalium (*Laevidentalium*) *subcompressum* Meyer, Harris and Palmer, 1947, p. 214, pl. 26, fig. 6 copy Meyer, cf. fig. 15; Brann and Kent, 1960, p. 321

Range.—Upper Eocene. Moodys Branch fm. (type), lower Jackson gr. Oligocene

Localities.—MISS.: *Hinds Co.*, Jackson (type); *Warren Co.*, Vicksburg (Oligocene); *Wayne Co.*, Red Bluff [Hiwanee Station], Chickasawhay R. (Oligocene)

Type.—Holotype, No. 638701 USNM

- Gadus juvenis* (Meyer)
See *Cadulus juvenis* Meyer
- Gadus subcoarctatus* [sic] (Gabb)
See *Cadulus* (*Dischides*) *subcoarctatus* (Gabb)
- Graptacme mediaviense* (Harris)
See *Dentalium mediaviense* Harris
- Graptacme minutistriatum* (Gabb)
See *Dentalium* (*Antalis*) *minutistriatum* Gabb
- Laevidentalium danai* (Meyer)
See *Fustiaria* (*Laevidentalium*) *danai* (Meyer)
- Laevidentalium subcompressum* (Meyer)
See *Fustiaria* (*Laevidentalium*) *subcompressa* (Meyer)
- Polyschides jacksonensis* (Meyer)
See *Cadulus* (*Polyschides*) *jacksonensis* Meyer
- Polyschides margarita* Palmer
See *Cadulus* (*Polyschides*) *margarita* Palmer
- Polyschides newtonensis* (Meyer and Aldrich)
See *Cadulus* (*Polyschides*) *newtonensis* Meyer and Aldrich
- Polyschides quadriturritus* (Meyer), Palmer, 1937 Jackson Eocene
See *Cadulus* (*Polyschides*) *margarita* Palmer
- Polyschides turritus* (I. Lea)
See *Cadulus* (*Polyschides*) *turritus* (I. Lea)
- Serpulorbis sylvaerupis* Harris
See *Dentalium sylvaerupis* (Harris)
- Siphonodentalium* ? *jacksonense* (Meyer)
See *Cadulus jacksonensis* Meyer
- Siphonodentalium* (*Cadulus* ?) *turgidus* (Meyer)
See *Cadulus turgidus* Meyer

CEPHALOPODA

- Advena americana* (Meyer and Aldrich)
See *Belemnosella americana* (Meyer and Aldrich)
- Advena floweri* Palmer
See *Belemnosella floweri* (Palmer)
- Anevda floweri* (Palmer)
See *Belemnosella floweri* (Palmer)

Angulithes elliotti (Stenzel)

Hercoglossidae

- Deltoidonautilus elliotti* Stenzel, 1940a, pp. 733, 759, pl. 38, figs. 1-6; pl. 39, figs. 1, 2; text figs. 123 (2), 124 (2); Stenzel, [1942], Cephalopoda cards Nos. 18a, 18b, 9 figs; Miller, 1947, p. 65, pl. 47, figs. 1, 2; pl. 48, figs. 1, 2 holotype, 3
- Angulithes elliotti* (Stenzel), Kummel, 1956, pp. 335, 456, fig. 33K

Range.—Middle Eocene. Marquez shale mem. (type), Reklaw fm., lower Claiborne gr.

Locality.—TEXAS: *Bastrop Co.*, bluff along Ridge Cr. about 1 mi. above Missouri, Kansas, and Texas R.R. trestle and the county road bridge, 6.2 mi. W. of Smithville or 0.8 mi. E. of Upton in east part of R. Andrews survey (Bur. Ec. Geol. sta. 11-T-7) (type)

Types.—Holotype, No. 20901; paratypes, Nos. 20902 (pl. 38, figs. 5, 6), 20896 (pl. 39) BEG

Aturia alabamensis (Morton)

Aturiidae

Nautilus alabamensis Morton, 1834, p. 33, pl. 18, fig. 3; Morton, 1842a, p. 217; Conrad, 1858c, p. 335; Aldrich, 1886, p. 43; de Gregorio, 1890, p. 15 as sp. dub., pl. 1, fig. "39" outline of Morton; Cossmann, 1893, p. 51

Megasiphonia alabamensis (Morton), d'Orbigny, 1850, p. 338

Aturia ziczac (Sowerby), Geinitz, 1887, pp. 53-56 in part, pl. III; de Gregorio, 1890, p. 14, pl. 1, figs. 35-38b [39b]. Not *Nautilus ziczac* James Sowerby, 1812, p. 12, pl. 1, fig. 3

Aturia alabamensis (Morton), Conrad, 1865a, p. 15; Conrad, 1866a, p. 26; Hopkins, 1917, p. 296 as *Belosepia ungula*, pl. 27, fig. 1; Cooke, 1926a, pl. 96, fig. 6; Kellum, 1926, p. 32; Semmes, 1929, fig. 62-6; Schenck, 1931, pp. 444, 445, pl. 77, fig. 1; pl. 78, fig. 1; Aldrich, 1931, p. 7, pl. 4, fig. 1; Scott, 1932, p. 328, pl. 23, fig. 15; Trowbridge, 1932, pl. 43, figs. 4, 5 copies Gardner, 1923; Stenzel, 1935, p. 556, pl. 63, figs. 2a-2b; text fig. 5; Miller and Furnish, 1938, pp. 150, 151, fig. F; pp. 153, 154, pl. 25, figs. 1, 2, 5, 6; Stenzel, 1940a, pp. 732-773; Stenzel, [1942], *Cephalopoda* cards Nos. 21a, 21b, figs. 1-3; Shimer and Shrock, 1944, p. 549, pl. 225, figs. 10, 11 copies Miller and Furnish; Miller, 1947, p. 81, pl. 56, figs. 7-9; pl. 57, figs. 1, 2 holotype; pl. 58, figs. 1, 2; pl. 59; pl. 60, figs. 1, 2; pl. 61; pl. 62, fig. 2; pl. 63, figs. 1, 2; pl. 64, figs. 1, 2; pl. 65, figs. 1-5; pl. 66, figs. 1, 2; pl. 67, figs. 1, 2; pl. 68, figs. 1, 2, 5, 6 see for more complete references; Harris and Palmer, 1947, p. 465, pl. 65, fig. 8; Richards and Palmer, 1953, p. 55 not Avon Park; Kummel, 1956, pp. 331, 466

Range.—Upper Eocene. Jackson gr.

Localities.—ALA.: *Monroe Co.*, near Claiborne (type). Presumably near Suggsville, *Clarke Co.* *vide* Stenzel, [1942]. For enumeration of localities see Miller, 1947, pp. 82-84

Type.—Holotype, No. 16120 ANSP. For reference to hypotypes see Miller, 1947, p. 83

Aturia brazoensis Stenzel

Aturiidae

Aturia (Brazaturia) brazoensis Stenzel, 1935, pp. 552, 555, 559, pl. 64, figs. 1a-1f, text fig. 3; Stenzel, 1940a, pp. 732, 766-769, 774, text figs. 125 (5), 126 (4)

Aturia brazoensis Stenzel, Stenzel [1942], *Cephalopoda* card Nos. 23a, 23b, figs. 1a, 1b holotype 1c, 1d, text figs. 4, 5; Miller, 1947, pp. 88-90, pl. 69, figs. 1-4, holotype; pl. 70, figs. 1, 2; pl. 71, figs. 1, 2; pl. 72, figs. 6, 7; pl. 73, fig. 7; Miller and Downs, 1950, pp. 10, 11, pl. 9, figs. 5, 6; Kummel, 1956, pp. 333, 467

Range.—Middle Eocene. Stone City beds (type), middle Claiborne gr.; Weches fm., middle Claiborne gr.

Localities.—TEXAS.: *Burleson Co.*, Stone City, bluff on right bank of Brazos R. at bridge at State Highway 21 and bridge of

Southern Pacific R.R. (type); *Leon Co.*, about 0.1 mi. S. of wooden bridge over MacDonald Creek in road running along boundary between B. Middleton and John Beauchamp surveys, in SW. corner of J. H. Cook 150 acres, SW. corner of John Beauchamp survey, 6.3 mi. WSW. of Centerville (paratype)

Types.—Holotype, No. 20908; paratypes, Nos. 20906, 20912 BEG

Cf. *Aturia brazoensis* Stenzel

Aturiidae

Aturia (Brazaturia) cf. At. brazoensis Stenzel, 1940a, p. 776

Range.—Middle Eocene. Crockett fm. [Cook Mt. fm.], upper Claiborne gr.

Locality.—TEXAS: *Webb Co.*, bluff left bank Chacon Cr. about ¼ mi. upstream from intersection Chacon Cr. with U.S. highway No. 96 (Laredo-Corpus Christi rd.), at E. city limits, Laredo

Types.—Unfigured specimens (7), No. 20907 BEG

***Aturia garretti* Stenzel**

Aturiidae

Aturia (Brazaturia) garretti Stenzel, 1940a, pp. 732, 766-769, 772, pl. 42, figs. 1-3, text figs. 125 (6), 126 (3)

Aturia garretti Stenzel, Stenzel [1942], Cephalopoda card No. 24; figs. 1-3, text fig. 5, 125 (6), 126 (3) holotype; Miller, 1947, p. 97, pl. 75, figs. 1, 2 holotype; Kummel, 1956, pp. 335, 467

Range.—Middle Eocene. Saline Bayou mem. (type), upper Cook Mt. fm., upper Claiborne gr.

Locality.—LA.: *Winn Par.*, left bank of Saline Bayou at R.R. trestle of Louisiana R.R. and Navigation Co., at St. Maurice, sec. 15, T. 9 N., R. 6 W. (type)

Type.—Holotype, No. 2001 LSU Pal. Mus.

***Aturia laticlavina* Stenzel**

Aturiidae

Aturia (Brazaturia) laticlavina Stenzel, 1935, pp. 552, 555, 558, pl. 63, figs. 4a, 4b; Stenzel, 1940a, pp. 732, 766-769, 773

Aturia laticlavina Stenzel, Stenzel [1942], Cephalopoda card No. 25; figs. 1, 4a, 4b, 125 (3), 126 (6b) holotype; Miller, 1947, p. 99, pl. 73, figs. 1, 2 holotype; Kummel, 1956, pp. 337, 467

Range.—Middle Eocene. Limestone bed in Tyus mem. (type), Weches fm., middle Claiborne gr.; lower Cane River glauconitic ml. [fm.], middle Claiborne gr.

Localities.—TEXAS: *Leon Co.*, Bald Mound, 0.5 mi. NW. of Hope-well Negro Church and school, on old Centerville-Jewett road, 4.83 mi. NW. of Centerville, H.R. Benson 50-acre tract, R. Woods survey (Bur. Ec. Geol. sta. 145-T-43) (type). LA.: *Natchitoches Par.*, in *Ostrea lisbonensis* Harris bed in road cut along State highway No. 12, 1.47 mi. S. of depot at Chestnut near center of sec. 7, T. 12 N, R. 6 W., Louisiana Meridian

Type.—Holotype, No. 20900 BEG

Aturia paucifex [sic] Cope

See *Aturoidea paucifex* (Cope)

Aturia paucifex Cope

See *Aturoidea paucifex* (Cope)

Aturia triangula Stenzel**Aturiidae**

Aturia (Brazaturia) triangula Stenzel, 1935, pp. 552, 555, 557, pl. 63, figs. 3a, b; text fig. 2; Stenzel, 1940a, pp. 732, 766-769

Aturia triangula Stenzel, Stenzel [1942] Cephalopoda card No. 26, figs. 3a, 3b, text figs. 2, 125 (4), 126 (5) holotype; Miller, 1947, p. 106, pl. 96, figs. 1-5 holotype; Kummel, 1956, pp. 343, 468

Range.—Middle Eocene. Limestone bed in Tyus mem. (type), Weches fm., middle Claiborne gr.

Locality.—TEXAS: *Leon Co.*, Bald Mound, 0.5 mi. NW. of Hope-well Negro church and school on old Centerville-Jewett road 4.83 mi. NW. of Centerville, H.R. Benson 50-acre tract, R. Woods survey (Bur. Ec. Geol. sta. 145-T-43) (type)

Type.—Holotype, No. 20914 BEG

Aturia turneri Stenzel**Aturiidae**

Aturia (Brazaturia) turneri Stenzel, 1940a, pp. 732, 766, 770, pl. 41, figs. 1-6, text figs. 125 (2), 126 (7)

Aturia turneri Stenzel, [1942], Cephalopoda cards Nos. 27a, 27b, figs. 1-5, text figs. 125 (2), 126 (7) holotype; Miller, 1947, p. 108, pl. 72, figs. 1-5 holotype; Kummel, 1956, pp. 343, 468

Range.—Middle Eocene. Marquez shale mem. (type), Reklaw fm., lower Claiborne gr. Found in concretionary discontinuous fossiliferous, lenticular, impure limestone, about 44 ft. below top of Marquez shale.

Locality.—TEXAS: *Bastrop Co.*, bluffs along Ridge Creek about 1 mi. above Missouri, Kansas, and Texas R.R. trestle and county line bridge, 6.2 mi. W. of Smithville or 0.8 mi. E. of Upton, in east part of R. Andrews survey. (Bur. Ec. Geol. Sta. 11-T-7) (type)

Type.—Holotype, No. 20905 BEG

Aturia vanuxemi (Conrad)**Aturiidae**

Nautilopsis Vanuxemi Conrad, 1848a, p. 299

Pelagus Vanuxemi (Conrad), Conrad, 1848b, p. 130, pl. 14, figs. 15, 17

Nautilus zig-zag [sic] Sowerby, Conrad, 1848b, p. 129. Not *N. ziczac* James Sowerby, 1812, p. 12

Aturia Vanuxemi (Conrad), Edwards, 1849, p. 52; Conrad, 1865a, p. 15; Conrad, 1866a, p. 19; Conrad in Cook, 1868, p. 377, text fig.; Conrad, 1868, p. 732; Whitfield, 1892, p. 287, pl. 49, figs. 1-3; pl. 50, fig. 1; Scott, 1898, p. 505, pl. 11, fig. 8; Scott, 1907, p. 737, pl. 16, fig. 8; Stenzel, 1935, pp. 555, 556 in subgenus *Brazaturia*; Stenzel, 1940a, p. 732; Stenzel, [1942], Cephalopoda card No. 28, figs. 15, 17; Shimer and Shroek, 1944, p. 549, pl. 225, figs. 12, 13 copies Whitfield; Miller, 1947, p. 109, pl. 62, fig. 1; pl. 79, fig. 4; pl. 97, figs. 1, 2 copies Whitfield; Kummel, 1956, pp. 343, 468. See Miller for further references.

Nautilus vanuxemi (Conrad), Conrad, 1858c, p. 335

Range.—Middle Eocene. Shark R. ml. (type), upper Claiborne gr.

Locality.—N.J.: *Monmouth Co.*, Long Branch (type)

Type.—Missing, ANSP Moore, 1962, p. 106

Aturia ziczac of authors not James Sowerby, 1812

See *Aturia alabamensis* (Morton)

Aturia sp.**Aturiidae**

Aturia (*Brazaturia*) sp. Barry, 1942+, pp. 24, 76, pl. 11, figs. 3-5;
Miller, 1947, p. 113, pl. 82, figs. 4, 5

Range.—Lower Eocene. Pendleton Ferry fm., middle Wilcox
[Sabine] gr.

Locality.—TEXAS: Sabine Co., Pendleton, west bank of Sabine R.
about ¼ mi. upstream from bridge on Louisiana Highway 6

Type.—Figured specimen, No. 5040 LSU Pal. Mus.

Aturoidea paucifex (Cope)**Hercoglossidae**

Aturia paucifex [sic] Cope, 1866, pp. 3, 4

Aturia paucifex Cope, 1867, p. 40

Hercoglossa paucifex (Cope), Conrad in Cook, 1868, p. 731; Whitfield,
1892, p. 246, pl. 39, fig. 1; Whitfield, 1899, p. 179; Johnson, 1905, p.
28; Weller, 1907, p. 815, pl. 102, fig. 1 type

Aturoidea paucifex (Cope), Miller and Thompson, 1935, p. 566, pl. 65,
figs. 1, 2; Miller and Furnish, 1938, p. 150, fig. 1E; Stenzel, 1940a,
p. 732; Stenzel, [1942], Cephalopoda card Nos. 19a, 19b, figs. 1, 2,
text fig. 1; Shimer and Shrock, 1944, p. 549, pl. 225, fig. 14 type copy
Weller; Miller, 1947, p. 73, pl. 55, fig. 3 holotype, text fig. 18 see
for complete synonymy; Kummel, 1956, pp. 339, 464, fig. 31J.

Range.—Paleocene. Hornerstown fm. (type)

Locality.—N.J.: Gloucester Co., marl pit of Thomas Heritage,
north of Glassboro (type)

Type.—Holotype, No. 13133 ANSP

Aturoidea pilsbryi Miller and Thompson**Hercoglossidae**

Aturoidea pilsbryi Miller and Thompson, 1935, p. 568, pl. 66, figs. 1-3;
Stenzel, 1940a, p. 732; Stenzel, [1942], Cephalopoda card No. 20,
figs. 1-3, text fig. 2; Miller, 1947, p. 76, pl. 55, figs. 1, 2 holotype;
text fig. 19; Kummel, 1956, pp. 339, 464

Range.—Lower Eocene. Probably Vincentown fm. (type); Manas-
quan fm.

Locality.—N.J.: Burlington Co., "At or near Medford". "Coll. Dr.
Thos. Wistar."

Type.—Holotype, No. 13137 ANSP

Belemnosella americana (Meyer and Aldrich)**Belemnositidae**

Belemnosis Americana Meyer and Aldrich, 1886, p. 47, pl. 2, figs. 26,
26a

Belemnosella americana (Meyer and Aldrich), Naef, 1922, p. 49, fig. 12;
Stenzel, 1941, p. 90

Advena americana (Meyer and Aldrich), Palmer, 1937, p. 511, pl. 76,
figs. 13, 14 copies Meyer and Aldrich

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—MISS.: Clarke Co., Wautubbee (type)

Type.—Holotype, No. 638750 USNM

Belemnosella floweri (Palmer)**Belemnositidae**

Advena floweri Palmer, 1937, p. 512, pl. 76, figs. 10-12, 15; Brann and
Kent, 1960, p. 29

Anevda floweri (Palmer), Palmer, 1940, p. 285

Belemnosella floweri (Palmer), Stenzel, 1941, p. 90

Range.—Middle Eocene. Gosport sd. (type), uppermost Claiborne gr.

Locality.—ALA.: Monroe Co., Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 3402 PRI

Belemnosis americana Meyer and Aldrich

See *Belemnosella americana* (Meyer and Aldrich)

Belosaepia alabamensis Palmer

Sepiidae

Belosaepia alabamensis Palmer, 1937, p. 508, pl. 77, figs. 1, 15; Brann and Kent, 1960, p. 120

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 3403 PRI

Belosaepia alabamensis voltzi Palmer

Sepiidae

Belosaepia alabamensis voltzi Palmer, 1937, p. 509, pl. 77, figs. 10, 12; Brann and Kent, 1960, p. 120

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 3408 PRI

Belosaepia harrisi Palmer

Sepiidae

Belosaepia harrisi Palmer, 1937, p. 510, pl. 77, figs. 11, 17, 19; Brann and Kent, 1960, p. 120

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., base of Claiborne Bluff, Alabama R. (type)

Type.—Holotype, No. 3409 PRI

Belosaepia saccaria Palmer

Sepiidae

Belosaepia saccaria Palmer, 1937, p. 509, pl. 77, figs. 4, 13, 16; Brann and Kent, 1960, p. 120

Range.—Middle Eocene. Cook Mt. fm. [upper Lisbon fm.] (type), upper Claiborne gr.

Locality.—ALA.: Monroe Co., Lisbon Ldg., W. bank Alabama R. about 6½ mi. above bridge at Claiborne (type)

Type.—Holotype, No. 3404 PRI

Belosaepia uncinata Palmer

Sepiidae

Belosaepia uncinata Palmer, 1937, p. 507, pl. 77, figs. 8, 9, 18, 20, 21; Brann and Kent, 1960, pp. 120, 121

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Localities.—LA.: Sabine Par., Columbus, Sabine R. (type);

Ouachita Par., Lapiniere Ldg., E. bank Ouachita R. ALA.:

Monroe Co., Lisbon Ldg., on W. bank Alabama R. about 6½ mi. above Claiborne bridge; base of Claiborne Bluff, Alabama R.

Types.—Holotype, No. 3407; paratypes, Nos. 3406, 3410 PRI

Belosaepia ungula Gabb**Sepiidae**

Sepia (Belosepia) ungula Gabb, 1860c, p. 324; Gabb, 1860d, p. 376, pl. 67, figs. 1-4

Belosepia ungula Gabb, Conrad, 1865a, p. 16; Conrad, 1866a, p. 19; Aldrich, 1886, p. 48; Meyer and Aldrich, 1886, p. 50 in part, not p. 17 as in De Gregorio; de Gregorio, 1890, p. 15; Cossmann, 1893, p. 51, pl. 2, figs. 8-10; Veatch, 1906, pl. 19, figs. 7, 7a, 7b copy Gabb; Shimer and Shrock, 1944, p. 597, pl. 250, figs. 19-21 copies Cossmann
Belosaepia ungula Gabb, Palmer, 1937, p. 505, pl. 77, figs. 2, 3, 5, 6, 7, 14; Brann and Kent, 1960, p. 121

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.; Gosport sd., uppermost Claiborne gr.

Localities.—TEXAS: *Robertson Co.*, Wheelock (type, Gabb)= Town Branch of Cedar Creek near Wheelock *vide* Stenzel, Krause, and Twining, 1957, p. 11. ALA.: *Monroe Co.*, Claiborne Bluff, Alabama R. (Gabb, Palmer)

Type.—Holotype, No. 12759 ANSP

Belosaepia veatchi Palmer**Sepiidae**

Belosaepia veatchi Palmer, 1937, p. 508, pl. 76, figs. 3-5; Brann and Kent, 1960, p. 121

Range.—Middle Eocene. Cook Mt. fm. (type), upper Claiborne gr.

Locality.—LA.: *Sabine Par.*, Columbus, Sabine R. (type)

Type.—Holotype, No. 3401 PRI

Belosepia

See *Belosaepia*

***Brazaturia garretti* Stenzel**

See *Aturia garretti* Stenzel

***Brazaturia laticlavata* Stenzel**

See *Aturia laticlavata* Stenzel

***Brazaturia turneri* Stenzel**

See *Aturia turneri* Stenzel

***Brazaturia* sp.**

See *Aturia* sp.

***Brazaturia triangula* Stenzel**

See *Aturia triangula* Stenzel

Cimomia haltomi* (Aldrich)*Hercoglossidae**

Nautilus sp. Aldrich, 1886, p. 60; de Gregorio, 1890, p. 14 *vide* Miller, 1947, p. 41

Eutrephoceras haltomi Aldrich, 1931, p. 6, pl. 1, fig. 1; pl. 2, fig. 1; pl. 3, figs. 1, 2

Cimomia haltomi (Aldrich), Miller and Thompson, 1933, p. 307, text figs. 2A, 3; Stenzel, 1940a, pp. 732, 752, fig. 119 (1); Stenzel, [1942], Cephalopoda card No. 7, figs. 1, 2, text figs. 2A, 3; Miller, 1947, p. 41, pl. 27, fig. 2 holotype; pl. 28, figs. 1, 2; Kummel, 1956, pp. 336, 450, fig. 31L

Range.—Paleocene. Sucarnoochee clay (type), upper Midway gr.

Locality.—ALA.: *Sumter Co.*, Black Bluff Ldg. (extant) east of Whitfield, right side of Tombigbee R. (type)

Types.—Holotype and paratypes, No. 18 GSATC; topotype figured by Miller and Thompson No. 615, Geol. Dept., State Univ. Iowa, Iowa City, Iowa

Cimomia marylandensis Miller and Thompson**Hercoglossidae**

- ? *Nautilus* sp. Tuomey, 1842a, p. 156; Tuomey, 1842b, p. 187
? *Nautilus* sp. Clark, 1895, p. 4; Clark, 1896, p. 63, pl. 9, fig. 1
Hercoglossa tuomeyi Clark and Martin, 1901, p. 122 in part, pl. 17;
pl. 19, fig. 1; not pl. 18, fig. 1; Stenzel, 1940a, pp. 746, 747, text fig.
117 (7) in part
Cimomia marylandensis Miller and Thompson, 1933, p. 305 footnote;
Stenzel, [1942], Cephalopoda card No. 8, fig. (pl. 17), fig. 1 holotype;
Miller, 1947, p. 44, pl. 42, figs. 1, 2 copy holotype; Kummel, 1956,
pp. 338, 451

Range.—Lower Eocene. Upper Woodstock greensand mem. (type),
Nanjemoy fm.

Locality.—MD.: *Charles Co.*, bluff one mile below Popes Creek
on left bank of Potomac R. (type)

Type.—Holotype, USNM

Cimomia subrecta Miller and Thompson**Hercoglossidae**

- Cimomia subrecta* Miller and Thompson, 1933, p. 308, pl. 35, figs. 1, 2,
text fig. 2B; Stenzel, 1940a, pp. 750-752, text figs. 118 (4), 119 (2);
Stenzel, [1942], Cephalopoda card Nos. 9a, 9b, figs. 1, 2, 2B; Shimer
and Shrock, 1944, p. 550, pl. 225, fig. 6 copy Miller and Thompson;
Miller, 1947, p. 46, pl. 31, figs. 1, 2 holotype; Kummel, 1956, pp. 342,
452

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Localities.—MISS.: *Okittbeha Co.*, about 4½ mi. S. of Starkville,
E. ½ sec. 28, T. 18 N., R. 14 E. (type); 3 mi. W. of Starkville
(paratype)

Type.—Holotype, No. 618; paratype, No. 619. Geol. Dept., State
Univ. Iowa, Iowa City, Iowa

Cimomia vauhani (Gardner)**Hercoglossidae**

- Enclimatoceras vauhani* Gardner, 1923, p. 115, pl. 33, figs. 1-3;
Trowbridge, 1932, pl. 32, fig. 1; pl. 33, figs. 1, 2 copies Gardner
Cimomia vauhani (Gardner), Miller and Thompson, 1933, p. 307;
Stenzel, 1940a, pp. 732, 750-753; pl. 37, figs. 1, 2; text figs. 118 (1),
119 (3); Stenzel, [1942] Cephalopoda cards Nos. 10a, 10b, fig. 1, text
figs. 118 (1), 119 (3); Miller, 1947, p. 47, pl. 27, fig. 1; pl. 32, figs. 1,
2; pl. 76, fig. 4; Kummel, 1956, pp. 343, 452, fig. 31N
Hercoglossa vauhani (Gardner), Berry, 1923, p. 429; Gardner, 1935,
p. 322, pl. 27, fig. 1; pl. 28, figs. 1, 2; not F. B. Plummer, 1933, p.
817, fig. 53 (= *Woodringia splendens* Stenzel, 1940a)

Range.—Paleocene. Kincaid fm. (type), lower Midway gr.; Wills
Point fm. (Stenzel), upper Midway gr.

Localities.—TEXAS: *Uvalde Co.*, ¾ mi. NW. of Evans' (Myrick's)
apiary, Frio R. (U.S.G.S. sta. 3178) (type). For additional
localities see Stenzel, 1940a, and Miller, 1947

Types.—Holotype, No. 352261; paratype, No. 352262 USNM

Cimomia vestali Miller and Thompson**Hercoglossidae**

- Cimomia vestali* Miller and Thompson, 1933, p. 311, pl. 36, figs. 1, 2,
text fig. 2c; Stenzel, 1940a, p. 751, text figs. 118 (3), 119 (4); Sten-
zel, [1942], Cephalopoda cards Nos. 11a, 11b, figs. 1, 2, 2c; Miller,
1947, p. 48, pl. 33, figs. 1, 2 holotype; Kummel, 1956, pp. 343, 452,
fig. 31 K

Range.—Paleocene. Clayton fm. (type), lower Midway gr.

Localities.—MISS.: Oktibbeha Co., east bluff of Trim Cane Cr., about 3 mi. W. and a little N. of Starkville (type); Noxubbee Co., SW. bluff of Yellow Cr., about 9 mi. NW. of Macon, sec. 7, T. 15 N., R. 16 E. (paratype)

Types.—Holotype, No. 616; paratype, No. 617. Geol. Dept., State Univ. Iowa, Iowa City, Iowa

Cimomia spp., Miller, 1947

See *Hercoglossa* spp.

Deltoidonautilus elliotti Stenzel

See *Angulithes elliotti* (Stenzel)

Enclimatoceras ulrichi (White)

See *Hercoglossa ulrichi* (White)

Enclimatoceras ulrichi Sloan, 1908. Not White, 1884b Cretaceous

See *Eutrephoceras sloani* Reeside

Enclimatoceras vughani Gardner

See *Cimomia vughani* (Gardner)

Eutrephoceras berryi Miller

Nautilidae

Eutrephoceras berryi Miller, 1947, p. 27, pl. 7, figs. 1, 2; Kummel, 1956, pp. 333, 380

Range.—Upper Eocene. Castle Hayne ls., (type), Jackson gr.

Locality.—N.C.: New Hanover Co., City Rock quarry, near Smith Creek on the east side of Wilmington (type)

Type.—Holotype, No. 559584 USNM

Eutrephoceras bryani (Gabb)

Nautilidae

Nautilus bryani Gabb, 1877, p. 277; Whitfield, 1892, p. 244, pl. 38, figs. 5, 6; Whitfield, 1899, p. 179; Johnson, 1905, p. 28; Weller, 1907, p. 818, pl. 101, figs. 1, 2

Eutrephoceras bryani (Gabb), Reeside, 1924, p. 4; Miller, 1947, p. 28, pl. 8, figs. 1-4; pl. 93, figs. 1, 2

Eutrephoceras (?) *bryani* (Gabb), Stenzel, 1940a, p. 741, text fig. 115 (1), outline holotype; Stenzel, [1942], Cephalopoda card No. 1, figs. 1, 2 holotype, copy Weller, 1907; Kummel, 1956, pp. 333, 380

Range.—Lower Eocene. Vincentown fm. (type)

Locality.—N.J.: Burlington Co., Vincentown (type)

Type.—Holotype, No. 16117 ANSP (1 paratype)

Eutrephoceras carolinense Kellum

Nautilidae

Eutrephoceras carolinense Kellum, 1926, p. 32, pl. 7, figs. 5-7; Stenzel, 1940a, p. 741, text fig. 115 (8); Stenzel, [1942], Cephalopoda card No. 2, figs. 5, 6 holotype, fig. 7 paratype; Miller, 1947, p. 29, pl. 9, figs. 1-6; Kummel, 1956, pp. 333, 381

Range.—Upper Eocene. Castle Hayne ls. (type), Jackson gr.

Localities.—N.C.: New Hanover Co., City Rock quarry near Smith Creek; east side of Wilmington (type); Castle Hayne; Pender Co., Old Rocky Point

Types.—Holotype, No. 353299 USNM; paratypes, Nos. 138051, 559585-559589 USNM

Eutrephoceras cookanum (Whitfield)**Nautilidae**

Nautilus cookana Whitfield, 1892, p. 285, pl. 48, fig. 1; pl. 49, figs. 4-5, text fig. 2; Whitfield, 1899, p. 180 as *N. cooki*

Eutrephoceras cookana (Whitfield), Reeside, 1924, p. 4

Eutrephoceras cookanum (Whitfield), Stenzel, 1940a, p. 741, text fig. 115 (4); Stenzel, [1942], Cephalopoda cards Nos. 3a, 3b, figs. 1, 4, 5 syntypes, fig. 6; Miller, 1947, p. 30, pl. 10, figs. 1, 2; pl. 11, figs. 1-3; pl. 12, fig. 1; pl. 13, figs. 1, 2; Kummel, 1956, pp. 334, 381, fig. 13 O

Range.—Middle Eocene. Stony layer at top of Shark River ml. (type), upper Claiborne gr.

Locality.—N.J.: Monmouth Co., Squankum (type) (*vide* Whitfield, 1899); Shark R.

Types.—Syntype, No. UC 35337 CNHM; syntype, No. 9775 AMNH

Eutrephoceras dekayi (Morton), Johnson, 1905. Not Morton, 1834 Cretaceous

See *Eutrephoceras* sp.

Eutrephoceras haltomi Aldrich

See *Cimomia haltomi* (Aldrich)

Eutrephoceras johnsoni Miller**Nautilidae**

Eutrephoceras johnsoni Miller, 1947, p. 32, pl. 18, figs. 1, 2; Kummel, 1956, pp. 336, 382

Range.—Paleocene. Midway gr. (type)

Locality.—ALA.: Wilcox Co., "along Prairie Creek", Prairie Creek, W. of Oak Hill (type)

Type.—Holotype, No. 129552 USNM

Eutrephoceras jonesi Miller and Thompson**Nautilidae**

Eutrephoceras jonesi Miller and Thompson, 1933, p. 303, pl. 34, figs. 1, 2; Stenzel, 1940a, p. 741, text fig. 115 (5); Stenzel, [1942], Cephalopoda card No. 4, figs. 1, 2 holotype; Miller, 1947, p. 32, pl. 19, figs. 1, 2; Kummel, 1956, pp. 337, 382, fig. 13D

Range.—Paleocene. Midway gr. (type)

Locality.—ALA.: "Clarke Co.," (type)

Type.—Holotype, No. 55 GSATC

Eutrephoceras reesidei Stenzel**Nautilidae**

Eutrephoceras n. sp. Stenzel, 1939, pp. 132, 156

Eutrephoceras reesidei Stenzel, 1940a, p. 738, pl. 35, figs. 5-7; text fig. 115 (7); Stenzel, [1942], Cephalopoda card No. 5, figs. 5-7; Miller, 1947, p. 34, pl. 15, figs. 1-3 holotype; Kummel, 1956, pp. 340, 383, fig. 13 I

Range.—Middle Eocene. Basal conglomerate, Wheelock mem. (type), Cook Mt. fm., upper Claiborne gr.

Locality.—TEXAS: Leon Co., small draw tributary to a branch which flows northward along the east line of P. L. Reinhardt 200-acre tract and enters Boggy Cr., the small draw is N. of a wagon road of N. 68° E. direction and in the NE. part of the tract, in Nathaniel M. Allen and Fernando del Valle surveys, where these surveys overlap, about 3.5 mi. airline distance E. of Leona (Bur. Ec. Geol. loc. No. 145-T-50) (type)

Type.—Holotype, No. 20895 BEG

Eutreploceras sloani Reeside**Nautilidae**

Enclimatoceras ulrichi Sloan, 1908, p. 319 (not 553 as in Stenzel [1942]). Not *E. ulrichi* (White), 1884b, p. 17

Eutreploceras sloani Reeside, 1924, p. 3, pls. 1-3; Miller and Thompson, 1933, p. 302; Cooke, 1936, p. 43; Stenzel, 1940a, p. 741, text fig. 115 (6); Stenzel, [1942], Cephalopoda cards Nos. 6a, 6b, figs. 1-3, not p. 553 in Sloan as on card; Miller, 1947, p. 35, pl. 22, figs. 1, 2; pl. 23, fig. 1; Kummel, 1956, pp. 341, 383, fig. 13 L

Range.—Lower Eocene. Black Mingo fm. (type), Wilcox gr.

Locality.—S.C.: Georgetown Co., Perkins Bluff, on west (left) bank of Black R., 3 mi. above mouth of Black Mingo Creek (type)

Type.—Holotype, No. 352558 USNM not 352559 as in Reeside

Eutreploceras n. sp. Stenzel, 1939

See *Eutreploceras reesidei* Stenzel

Eutreploceras sp.**Nautilidae**

Nautilus Dekayi Morton, Whitfield, 1892, p. 243 in part, pl. 38, figs. 3, 4 not pl. 37, figs. 1-6; pl. 38, figs. 1, 2; Whitfield, 1899, p. 180;

Weller, 1907, p. 817 in part, pl. 100, fig. 5 not pl. 100, figs. 1-4

Eutreploceras dekayi (Morton), Johnson, 1905, p. 28

Eutreploceras sp., Miller, 1947, p. 37, pl. 6, figs. 1-3

Range.—Paleocene. Hornerstown fm.

Locality.—N.J.: Monmouth Co., J. S. Cook's pit, near Tintonfalls

Types.—Figured specimens, Rutgers *vide* Whitfield, 1899

Hercoglossa gardnerae Stenzel**Hercoglossidae**

Hercoglossa gardnerae Stenzel, 1940a, pp. 733, 743, pl. 36, figs. 1, 2, text fig. 116 (3), 117 (1); Stenzel, [1942], Cephalopoda cards Nos. 12a, 12b, figs. 1-3, text fig. 1; Miller, 1947, p. 50, pl. 34, figs. 1, 2 holotype; Kummel, 1956, p. 335, 461, fig. 31 D

Range.—Paleocene. Upper part of Kincaid fm. (type), lower Midway gr.

Localities.—TEXAS: Maverick Co., S. side Cuero Cr. about 4½ mi. up from San Antonio outpost. San Antonio outpost is 0.4 mi. from Rio Grande and NE. of San Antonio crossing opposite Guerrero, Mexico (type); about 1 mi. N. Lopez tank on McFarland windmill road. (paratype)

Types.—Holotype and 7 paratypes, No. 30443; paratype, No. 30448 BEG

Hercoglossa mcglameryae Miller and Thompson**Hercoglossidae**

Hercoglossa mcglameryae Miller and Thompson, 1933, p. 322, pl. 38, figs. 1-2, text fig. 2 D; Stenzel, 1940a, pp. 733, 745, fig. 116 (5); p. 747, fig. 117 (6); Stenzel, [1942], Cephalopoda cards Nos. 13a, 13b, figs. 1, 2 text fig. 2 D; Miller, 1947, p. 53, pl. 13, figs. 3, 4; pl. 14, figs. 1, 2; pl. 64, fig. 4; Kummel, 1956, pp. 338, 462, fig. 31 G

Range.—Paleocene. "Nautilus Rock", Clayton fm. (type), lower Midway gr.

Locality.—ALA.: Lowndes Co. (type)

Types.—Holotype and paratypes, No. 56 GSATC

Hercoglossa orbiculata (Tuomey)**Hercoglossidae**

Nautilus orbiculatus Tuomey, 1854, p. 167; Conrad, 1858c, p. 335; Whitfield, 1892, p. 246

Hercoglossa orbiculata (Tuomey), Conrad, 1866d, p. 101; Hyatt, 1883, p. 270; Miller and Thompson, 1933, p. 315, pl. 37, figs. 1, 2; text fig. 2 F; Miller and Furnish, 1938, p. 150; Stenzel, 1940a, p. 745, fig. 116 (1); p. 747, fig. 117 (3); Stenzel, [1942], Cephalopoda card Nos. 14a, 14b, figs. 1, 2, 4, text fig. 2 F; Miller, 1947, p. 55, pl. 38, figs. 1, 2; pl. 39, figs. 1, 2; pl. 40, figs. 1, 2; text fig. 7 C; Kummel, 1956, pp. 339, 457, 462, fig. 33 F, pl. 27, figs. 1, 2

Range.—Paleocene. "Nautilus Rock", Clayton fm. (type), lower Midway gr.

Localities.—ALA. (type): *Wilcox Co.*, Pine Barren Creek, about 5 mi. N. of Allentown (neotype)

Type.—Holotype lost. Neotype, No. 612 Geol. Dept., State Univ. Iowa, Iowa City, Iowa (Miller and Thompson)

Hercoglossa paucifex (Cope)

See *Aturoidea paucifex* (Cope)

Hercoglossa splendens (Stenzel)**Hercoglossidae**

Hercoglossa ulrichi H. J. Plummer, 1933, p. 62. Not *H. ulrichi* (White) *vide* Stenzel, 1940a

Hercoglossa vaughani F. B. Plummer, 1933, p. 817, fig. 53. Not *H. vaughani* Gardner *vide* Stenzel, 1940a

Woodringia splendens Stenzel, 1940a, pp. 733, 755, pl. 35, figs. 1-3; figs. 120 (1), 121 (1, 3); Stenzel, [1942], Cephalopoda cards Nos. 17a, 17b, figs. 1-3, text figs. 120-122; Miller, 1947, p. 69, pl. 18, figs. 3-5

Hercoglossa splendens (Stenzel), Kummel, 1956, pp. 342, 462, fig. 31 E

Range.—Paleocene. Uppermost beds, Wills Point fm. (type), upper Midway gr.

Locality.—TEXAS: *Navarro Co.*, S. side Foggyhead Cr., Smith's pasture and about 0.15 mi. W. of bridge on Kerens-Round Prairie rd., 3.8 mi. by road SSE. of depot in Kerens (Bur. Ec. Geol. sta. 174-T-6) (type)

Type.—Holotype, missing, 1962, BEG. Not Walker Museum, Chicago as in Miller, 1947

Hercoglossa tuomeyi Clark and Martin**Hercoglossidae**

? *Nautilus* sp. Tuomey, 1842a, p. 156 (1842b, p. 187)

? *Nautilus* sp. Clark, 1895, p. 4; Clark, 1896, p. 63, pl. 9, fig. 1

Hercoglossa tuomeyi Clark and Martin, 1901, p. 122, pl. 18, fig. 1; ? pl. 19, fig. 2, fig. 3 copy Clark, 1896, not pl. 17, pl. 19, fig. 1 (= *Cimomia marylandensis* Miller and Thompson); Berry, 1923, p. 428; Miller and Thompson, 1933, pp. 305+footnote, 314, 323; Stenzel, 1940a, pp. 732, 746, fig. 117 (7) in part; Stenzel, [1942], Cephalopoda card No. 15, fig. (pl. 18) copy Clark and Martin; Miller, 1947, p. 59, pl. 41 holotype; pl. 42, figs. 3, 4; Kummel, 1956, pp. 343, 462

Range.—Lower Eocene. Upper part Woodstock greensand marl mem. (type), Nanjemoy fm.

Locality.—MD.: *Charles Co.*, bluff about 1 mi. below Popes Cr., left bank Potomac R. (type)

Types.—Lectotype (Miller and Thompson, 1933, p. 305), USNM

Hercoglossa tuomeyi Clark and Martin in part

See also *Cimomia marylandensis* Miller and Thompson

Hercoglossa ulrichi (White)**Hercoglossidae**

Nautilus texanus Shumard, White, 1882, p. 137. Not *N. texanus* Shumard, 1860, p. 590

Enclimatoceras ulrichi White, Hyatt, 1883, p. 270 *nomen nudum*

Enclimatoceras (Nautilus) ulrichi White, 1884b, p. 17, pl. 7, figs. 1-3; pl. 8, fig. 1; pl. 9, fig. 1; Harris, 1894b, p. 36, pl. 2, figs. 1-3; Schuchert, et al., 1905, p. 241

Enclimatoceras ulrichi White, Harris, 1896, p. 236, pl. 13, figs. 1-3; pl. 14, fig. 1; pl. 15, fig. 1; Veatch, 1906, p. 34, pl. 16, figs. 1, 1a, 1b copies White

Hercoglossa ulrichi (White), Foord and Crick, 1890, p. 392; Berry, 1923, p. 428; Deussen, 1924, p. 43, pl. 14, figs. 1, 1a, 1b (copies White); Miller and Thompson, 1933, p. 319 text fig. 2 E (pp. 308, 309); Stenzel, 1940a, pp. 744-748, fig. 116 (4), fig. 117 (4, 5); Stenzel, [1942], Cephalopoda cards Nos. 16a, 16b, 5 figs. copies White, 1884; Shimer and Shrock, 1944, p. 549, pl. 225, figs. 7-9; Miller, 1947, p. 60, pl. 43, fig. 1; pl. 44, figs. 1, 2 holotype, 3, 4; pl. 45, figs. 1, 2 see for further references; Kummel, 1956, pp. 343, 462, fig. 31 B

Range.—Paleocene. Clayton fm. lower Midway gr. (Texas, Ark. Miss., Ala., Tenn.)

Localities.—ARK.: *Pulaski Co.*, vicinity of Olsen's switch on Missouri Pacific R.R., on Fourche Cr. near mouth of Crooked Cr., NW. $\frac{1}{4}$, SE. $\frac{1}{4}$, sec. 8, T. 1 S., R. 13 W., about 10 mi. SW. of Little Rock (Harris, 1894b) (type). For further localities see Miller, 1947, p. 61

Types.—Holotype and paratypes, No. 8349 USNM; paratypes, Nos. 12346, 18711 USNM

Hercoglossa ulrichi H. J. Plummer, 1933, p. 62. Not White, 1884

See *Hercoglossa splendens* (Stenzel)

Hercoglossa vauhani (Gardner)

See *Cimomia vauhani* (Gardner)

Hercoglossa vauhani F. B. Plummer, 1933. Not Gardner, 1923

See *Hercoglossa splendens* (Stenzel)

Hercoglossa walteri Miller**Hercoglossidae**

Hercoglossa walteri Miller, 1947, p. 62, pl. 46, figs. 1, 2; Kummel, 1956, pp. 343, 462

Range.—Paleocene. "Nautilus Rock" Clayton fm. (type), lower Midway gr.

Locality.—ALA.: *Wilcox Co.*, in creek bed S. of Alabama Highway 96, about 13 mi. NE. Kimborough (type)

Type.—Holotype, No. 1085, Geol. Dept., State Univ. Iowa, Iowa City, Iowa

Hercoglossa, n. sp.**Hercoglossidae**

Hercoglossa n. sp. Stenzel, 1940a, pp. 733, 749; Miller, 1947, p. 64

Range.—Middle Eocene. Tyus mem., Weches fm., middle Claiborne gr.

Locality.—TEXAS: *W. Houston Co.*, Kickapoo Shoals, flat bench in bed of Trinity R. at sharp bend 1.72 mi. upstream from toll bridge, Ramon de la Garza Survey (Bur. Ec. Geol. loc. 113-T-16)

Type.—Unfigured specimen, missing 1962, BEG

Hercoglossa or Cimomia sp.**Hercoglossidae**

Hercoglossa sp. Gardner, 1935, p. 322

Hercoglossa or *Cimomia* sp., Miller, 1947, p. 64

Range.—Paleocene. Littig glauconitic mem., Kincaid fm., lower Midway gr.

Locality.—TEXAS: *Guadalupe Co.*, small branch 2.8 SW. of Staples, 5 mi. E. of Zorn (USGS sta. 13244)

Type.—Unfigured specimen not seen USNM

Hercoglossa sp. or Cimomia sp.**Hercoglossidae**

Hercoglossa sp. or *Cimomia* sp. Miller, 1947, p. 113, pl. 99, figs. 1, 2

Range.—Lower Eocene. Nanjemoy fm.

Locality.—MD.: *Charles Co.*, bluff Potomac R., ½ mi. below Popes Creek

Type.—Figured specimen, No. 371891 USNM

Megasiphonia alabamensis (Morton)

See *Aturia alabamensis* (Morton)

Nautilopsis Vanuxemi Conrad

See *Aturia vanuxemi* (Conrad)

Nautilus alabamensis Morton

See *Aturia alabamensis* (Morton)

Nautilus bryani Gabb

See *Eutrephoceras* ? *bryani* (Gabb)

Nautilus cookana Whitfield

See *Eutrephoceras cookanum* (Whitfield)

Nautilus dekayi Morton, Whitfield, 1892 in part. Not Morton, 1834, Cretaceous

See *Eutrephoceras* sp.

Nautilus orbiculatus Tuomey

See *Hercoglossa orbiculata* (Tuomey)

Nautilus texanus Shumard, White, 1882. Not Shumard, 1860

See *Hercoglossa ulrichi* (White)

Nautilus zig-zag [sic] "(Sow.)", Conrad, 1848b

See *Aturia vanuxemi* (Conrad)

Nautilus sp. Clark, 1895 and 1896

See *Hercoglossa tuomeyi* Clark and Martin

See also *Cimomia marylandensis* Miller and Thompson

"Nautilus" sp.

Nautilus fragment Harris, 1899a, p. 103, pl. 12, fig. 26; Brann and Kent, 1960, p. 587

Range.—Lower Eocene. Hatchetigbee fm., upper Wilcox [Sabine] gr.

Locality.—ALA.: *Clarke Co.*, Woods Bluff, Tombigbee R.

Type.—Figured specimen No. 1390 PRI

- Nautilus* sp. Tuomey, 1842a, p. 156 and 1842b, p. 187
 See *Hercoglossa tuomeyi* Clark and Martin
 See also *Cimomia marylandensis* Miller and Thompson
- Nautilus* sp. Aldrich, 1886, p. 60; de Gregorio, 1890, p. 14
 See *Cimomia haltomi* (Aldrich)
- Pelagus vanuxemi* (Conrad)
 See *Aturia vanuxemi* (Conrad)
- Sepia* (*Belosepia*) *ungula* Gabb
 See *Belosaepia ungula* Gabb
- Woodringia splendens* Stenzel
 See *Hercoglossa splendens* (Stenzel)

LITERATURE CITED

Adams, Arthur

1851. *Catalogue of the species of Nassa, a genus of gasteropodous Mollusca belonging to the family Buccinidae, in the collection of Hugh Cumming, Esq., with the description of some new species.* Zool. Soc. London, Proc. 1851, pt. 19, pp. 94-112 (1852); pp. 113-114 (1853)

Adams, Arthur, and Reeve, Lovell Augustus

- 1848 [1850]. *The Zoology of the voyage of H. M. S. Samarang . . . Molusca.* London, No. 7, x + 87 pp., 24 pls.

Adams, George Irving, Butts, Charles, Stephenson, Lloyd William, and Cooke, Wythe

1926. *Geology of Alabama.* Special Rept., No. 14, University, Ala., 312 pp., 97 pls.

Aldrich, Truman Hemingway

- 1885a. *Notes on the Tertiary of Alabama and Mississippi, with descriptions of new species.* Cincinnati Soc. Nat. Hist., Jour., vol. 8, No. 2, pp. 145-153, pls. 2, 3 in part
- 1885b. *Notes on Tertiary fossils, rare, or little known.* Cincinnati Soc. Nat. Hist., vol. 8, No. 2, pp. 153-155, pl. 3 in part
- 1885c. *Observations upon the Tertiary of Alabama.* Amer. Jour. Sci., vol. 130, 3d ser., vol. 30, No. 178, Art. 40, pp. 300-308
1886. *Part I. Preliminary report on the Tertiary fossils of Alabama and Mississippi.* Pp. 15-60, pls. 1-6, tables 1-10 in Smith, Eugene Allen, Geol. Sur. Alabama, Bull. No. 1, 85 pp., 9 pls.
- 1886a. *Notes on the distribution of Tertiary fossils in Alabama and Mississippi.* Cincinnati Soc. Nat. Hist., Jour., vol. 8, No. 4, pp. 256-257
1886. Aldrich, T. H., and Meyer, Otto. See under Meyer, Otto, and Aldrich, T. H.
1887. *Notes on Tertiary fossils, with descriptions of new species.* Cincinnati Soc. Nat. Hist., Jour., vol. 10, No. 2, pp. 78-83, 1 fig.
1890. *A new Eocene fossil from Texas.* Nautilus, vol. 4, No. 3, p. 25, 2 figs.
- 1894a. *New Tertiary fossils from Red Bluff, Mississippi.* Nautilus, vol. 7, No. 9, pp. 97-99, pl. 4

- 1894b. *Paleontology of the Eocene of Alabama*. Pp. 232-239; *The (Mid-way) Clayton Tertiary section and its fossils*. Pp. 240-248, pls. 12-15 in Smith, Eugene Allen, Johnson, Lawrence Clement, and Langdon, Daniel W. Jr., *Report on the geology of the Coastal Plain of Alabama*. Alabama Geol. Sur., 759 pp., 29 pls.
- 1895a. *Descriptions of two new Eocene Solariidae from Alabama*. Nautilus, vol. 9, No. 1, pp. 1-2, pl. 1
- 1895b. *New or little known Tertiary Mollusca from Alabama and Texas*. Bull. Amer. Paleont., vol. 1, No. 2, 30 pp., 5 pls.
- 1897a. *Notes on Eocene Mollusca with descriptions of some new species*. Bull. Amer. Paleont., vol. 2, No. 8, 26 pp., 5 pls.
- 1897b. *A new Cancellaria from the Alabama Eocene*. Nautilus, vol. 11, No. 2, p. 27, 1 fig.
1898. *Some new Eocene fossils from Alabama*. Nautilus, vol. 11, No. 9, pp. 97-98
1901. *A Texas oil well fossil*. Nautilus, vol. 15, No. 7, p. 74, 2 figs.
1903. *New species of Tertiary fossils from Alabama, Mississippi, and Florida*. Nautilus, vol. 16, No. 9, pp. 97-101, pls. 3-4
- 1903a. *Two new species of Eocene fossils from the Lignitic of Alabama*. Nautilus, vol. 17, No. 2, pp. 19-20, 2 figs.
1904. *A new oyster from the Eocene of Alabama*. Nautilus, vol. 18, No. 6, p. 61, pl. 3, figs. 1-4
1907. *Some new Eocene fossils from Alabama*. Nautilus, vol. 21, No. 1, pp. 8-11, pl. 1
- 1908a. *A new Eocene fossil from Claiborne*. Nautilus, vol. 22, No. 2, p. 13, fig.
- 1908b. *New Eocene fossils from Alabama and Mississippi*. Nautilus, vol. 22, No. 8, pp. 74-76, pl. 5
- 1910a. *A new fossil Mitra from west Florida and a new Eocene Astarte*. Nautilus, vol. 23, No. 10, pp. 121-122, pl. 11, figs. 1-3
- 1910b. *New Eocene fossils from the southern states*. Nautilus, vol. 24, No. 7, pp. 73-75, pl. 4
1911. *New Eocene fossils from the southern gulf states*. Bull. Amer. Paleont., vol. 5, No. 22, 24 pp., 5 pls.
1921. *New Eocene species from Alabama*. Bull. Amer. Paleont., vol. 9, No. 37, 32 pp., 3 pls.
1923. *New molluscan names*. Biol. Soc. Washington, Proc., vol. 36, p. 199
1931. *Description of a few Alabama Eocene species and remarks on varieties*. Alabama Mus. Nat. Hist., Mus. Paper 12, 21 pp., 6 pls.

Anonymous Review of Heilprin, Angelo

1883. *The Tertiary deposits of the Atlantic slope*. Amer. Nat., vol. 17, pp. 308-309

Anton, Hermann Eduard

1839. *Verzeichniss der Conchylien* . . . Halle. xvi + 110 pp.

Archiac, Étienne Jules Adolphe Desmier de St. Simon d'

1843. *Description géologique du Département de l'Aisne*. Soc. géol. France, Mem., 1st ser., t. 5, pt. 2, Mem. 3, pp. 17-419, pls. 1-31, map. Read Dec. 7, 1840
1846. *Description des fossiles recueillis par M. Thorent, dans les couches à Nummulites des environs de Bayonne*. Soc. géol. France, Mem., 2d ser., t. 2, pt. 1, Mem. 4, pp. 189-217, pls. 5-9. Read May 4, 1846

Arnold, Ralph, and Hannibal, Harold

1914. *Dickerson on California Eocene*. Science, n. s., vol. 39, pp. 906-908

Barry, John O'Keefe

1942+. *Systematic descriptions of lower Eocene Anthozoa, Echinoidea, Pelecypoda and Cephalopoda of Louisiana*. Pp. 41-77, pls. 1-11 in Barry, J. K., and Le Blanc, R. J., *Lower Eocene faunal units of Louisiana*, which see

Barry, John O'Keefe, and Le Blanc, Rufus Joseph

1942+. *Lower Eocene faunal units of Louisiana*. Louisiana Dept. of Conservation, Geol. Bull., No. 23, 208 pp., 19 pls., 5 text figs., 2 tables.

Bartsch, Paul

1904. See under Dall, W. H., and Bartsch, P.

1909. See under Dall, W. H., and Bartsch, P.

Basterot, B. de

1825. *Description géologique du Bassin Tertiaire sud-ouest de la France*. 1st part . . . *observations générales sur les Mollusques fossiles* . . . Soc. Hist. Nat. Paris, Mem., t. 2, pt. 1, 100 pp., 7 pls.

Bellardi, Luigi

1847. *Monografia delle Pleurotome fossili del Piemonte*. Reale Accad. Sci. Torino, mem., ser. 2, t. 9, pp. 531-650, 4 pls.

1872-1888. *I Molluschi dei terreni Terziarii del Piemonte e della Liguria*. Reale Accad. Sci. Torino, mem.

1872. Pt. 1. *Cephalopoda, Pteropoda, Heteropoda, Gasteropoda (Muri-
cidae e Tritonidae)*. Pp. 279, 312 figs. [Reale Accad. Sci. Torino,
mem., ser. 2, t. 27]

1877. Pt. 2. *Pleurotomidae*. Pp. 373, 386 figs. [*Ibid.*, t. 29]

1882. Pt. 3. *Buccinidae, Cyclopsidae, Purpuridae, Coralliophyllidae,
Olividae*. Pp. 265, 12 pls. [*Ibid.*, t. 34]

1884. Pt. 4. *Fasciolaridae e Turbinellidae*. Pp. 64, 2 pls. [*Ibid.*, t. 37]

1887a. Pt. 5. *Mitridae*. Fasc. 1, pp. 85, 2 pls. [*Ibid.*, t. 38]

1887b. *Ibid.* Fasc. 2, 70 pp., pls. 3-4. [*Ibid.*, t. 38]

1888. *Ibid.* Fasc. 3, 223 pp., pls. 5-6 [*Ibid.*, t. 39]

Berry, Edward Wilber

1923. *A new Hercoglossa from the Eocene of Peru*. Amer. Jour. Sci., ser. 5, vol. 6, No. 35, Art. 34, pp. 427-431, 2 figs.

Beyrich, Heinrich Ernst

1854. *Die Conchylien des Norddeutschen Tertiärgebirges*. Pt. 2. Zeitschr. Deutsch geol. Gesell. Berlin, Bd. VI, pp. 408-500, pls. 9-14

Binney, William Greene

1858. *The complete writings of Thomas Say*. New York, H. Bailliere, 249 pp., 16 pls.

Blake, William Phipps

1856. *Geological Report*. Pt. 2, Pp. xvi + 370, 19 pls in Williamson, R. S. *Report of explorations in California for railroad routes* . . . Vol. 5, U.S. 33d Congress, 2d sess., House of Rep., Ex. Doc., No. 91

Bolten, Joachim Friedrich

1798. *Museum Boltenianum sive catalogus cimeliorum e tribus regnis naturae*. Pars. 2. *Conchyia sive testacea univalvia, bivalvia & multivalvia*. Hamburg, viii + 199 pp. (reprint by C. Davies Sherborn and E. R. Sykes, 1906). Credit as to names under Roeding, P. F., see Winckworth, 1945.

Born, Ignatius

1778. *Index rerum naturalium Musei Caesarei Vindobonensis*. Pars. I *Testacea*. Vindobonae, 458+ pp., 1 pl.
1780. *Testacea Musei Caesarei Vindobonensis*. Vindobonae, xxxvi+ 442. pp., index, 18 pls.

Borson, Stephano

- 1758-1832. [1823] *Catalogue raisonné de la Collection Minéralogique du Musée d'Histoire naturelle* . . . Turin, 1830, pp. xviii + 742
1820a. *Saggio di Orittografia Piemontese*. R. Accad. Sci. Torino, mem., t. 25, pp. 180-229, 1 pl.
1825a. *Continuazione del Saggio di orittografia piemontese*. Reale Accad. Sci. Torino, mem., 1st ser., t. 29, pp. 251-318, 36 figs. on pl [no no.]

Bory de Saint Vincent

- 1832-1836. *Expédition scientifique de Morée*. Three tom [in 5] and Atlas in 2 vol.

Boury, Eugene Aubourg de

1910. [1911] *Étude sur les sous-genres de Scalidae vivants et fossiles*. Jour. Conchyliol., vol. 58, 4th ser., t. 12, pp. 212-260, 2 pls.
1912. *Description de Scalidae nouveaux ou peu connus*. Jour. Conchyliol., vol. 60, 4th ser., t. 14, pp. 87-107, 169-196, 269-322, pls. 7-11
1917. *Revision critique de l'étude des Scalaires faite par M. Cossmann dans les "Essais le Paléoconchologie"*. Jour. Conchyliol., vol. 63, 4th ser., t. 17, pp. 13-62

Bowles, Edgar Oliver

1934. See under Gardner, Julia Anne, and Bowles, Edgar Oliver
1939. *Eocene and Paleocene Turritellidae of the Atlantic and Gulf Coastal Plain of North America*. Jour. Paleont., vol. 13, No. 3, pp. 267-336, pls. 31-34
1939. See Gardner, J. A., and Bowles, E. O.

Brander, Gustavo

1766. *Fossilia Hantoniensia collecta, et in Musaeo Britannico deposita*. London, 43 pp., 9 pls.

Brann, Doris Colgate, and Kent, Lois Schoonover

1960. *Catalogue of the type and figured specimens in the Paleontological Research Institution*. Bull. Amer. Paleont., vol. 40, No. 184, 996 pp., 1 pl.

Brantly, John Edward

1916. *A report on the limestones and marls of the Coastal Plain of Georgia*. Georgia Geol. Survey, Bull. 21, 300 pp., 11 pls.
1920. *Petroleum possibilities of Alabama, Pt. II. Southern Alabama, Coastal Plain Area*. Geol. Sur. Alabama, Bull. 22, pp. 121-220

Broderip, William John

1828. *Descriptions of some new and rare shells*. Zool. Jour., vol. 3, pp. 81-85
 1835. [No title] "Specimens exhibited . . . genus *Mitra* . . . following account by Mr. Broderip was read." Zool. Soc. London, Proc. 1835, pt. 5, pp. 192-197

Broderip, William John, and Sowerby, George Brettingham, II

1829. *Observations on new or interesting Mollusca contained, for the most part, in the Museum of the Zoological Society*. Zool. Jour., vol. 4, pp. 359-379, 1 pl. (contd.)

Bronn, Heinrich Georg

- 1848a. *Index Palaeontologicus oder übersicht der bis jetzt bekannten Fossilen Organismen . . . unter mitwirkung der HH. Prof. H. R. Göppert und Herm. v. Meyer. Pt. I. Nomenclator palaeontologicus . . . Vol. I, A-M*, pp. lxxxiv + 775, Stuttgart
 1848b. *Ibid.* Vol. II, N-Z, pp. 777-1381, Stuttgart
 1849. *Ibid.* Pt. II. *Enumerator palaeontologicus . . .* Pp. 980, Stuttgart

Brown, Amos Peaslee, and Pilsbry, Henry Augustus

1912. *Note on a collection of fossils from Wilmington, North Carolina*. Acad. Nat. Sci. Philadelphia, Proc. 1912, vol. 64, pp. 152-153, 1 pl.

Browne, Ruth Gillespie, and Herrick, Stephen Marion

1963. *Smaller Paleocene Foraminifera from Reidland, Kentucky*. Bull. Amer. Paleont., vol. 46, No. 210, pp. 245-284, pls. 53-75

Buckley, Samuel Botsford

1874. *First Annual Report Geological Survey and Agricultural Survey of Texas*. Houston, 142 pp.

Burrows, Henry William

1891. See under Harris, G. F., and Burrows, H. W.

Butterlin, Jacques

1956. *La Constitution géologique et la structure des Antilles*. Centre Nat. Recherche Sci. Paris, 453 pp.

Butts, Charles

1926. See under Adams, G. I., Butts, C., Stephenson, L. W., and Cooke, W.

Call, Richard Ellsworth

1891. *The geology of Crowley's Ridge*. Geol. Sur. Arkansas, Ann. Rept., vol. 2, 223 pp., 8 pls.

Casey, Thomas Lincoln

- 1902a. *The Jackson outcrops on Red River [La.]*. Science, n. s., vol. 15, pp. 716-717
 1902b. *A new genus of Eocene Eulimidae*. Nautilus, vol. 16, No. 2, pp. 18-19
 1903. *Notes on the Conrad collection of Vicksburg fossils, with descriptions of new species*. Acad. Nat. Sci. Philadelphia, Proc. 1903, vol. 55, pp. 261-283
 1904. *Notes on the Pleurotomidae with descriptions of some new genera and species*. Acad. Sci. St. Louis., Trans., vol. 14, No. 5, pp. 123-170

Caster, Kenneth Edward

1938. *Macroscopic fauna of the Quimbriz (Eocene) formation on the Luculo River, Angola*. Commun. Serviços Geol. de Portugal, t. 20, 48 pp., 10 pls.
1945. *New name for two homonyms*. Jour. Paleont., vol. 19, No. 3, p. 319

Chavan, André

- 1936a. *Sur les variations de Venericardia planicosta*. Compte Rendu Sommaire des Séances de la Société Géologique de France. No. 7, pp. 116-118
1936b. *Les Venericardes du groupe Planicosta dans l'Eocene de l'Alabama*. Compte Rendu Sommaire des Séances de la Société Géologique de France. No. 7, pp. 166-168
1937. In Palmer, 1937., p. 210 which see
1937. *Essai critique de classification des Lucines*. Jour. Conchyliol., vol. 81, 4th ser., t. 35, pp. 133-153, 198-216, 237-282
1938. *Ibid.*, vol. 82, 4th ser., t. 36, pp. 59-97, 105-130, 215-241, text figs.
1951. *Dénominations supraspécifiques de Mollusques modifiées ou nouvelles*. Compte Rendu Sommaire des Séances de la Société Géologique de France, No. 11, pp. 210-212
1962. *Essai critique de classification des Ungulinidae*. Inst. roy. des Sci. Nat. de Belgique, Bull., t. 38, No. 23, 23 pp.

Cheetham, Alan Herbert

1961. *Age of the Castle Hayne fauna (Eocene) of North Carolina*. Jour. Paleont., vol. 35, No. 2, pp. 394-396
1963. *Late Eocene zoogeography of the eastern Gulf Coast region*. Geol. Soc. America, Mem. 91, 113 pp., 3 pls.

Chemnitz, Johann Hieronymus

- 1780-1795. *Neues systematisches Conchylien-Cabinet* . . . fortgesetzt Bd. IV-XI (see Martini, F. H. W.), Bd. 4, 1780, 344 pp., pls. 122-159

Clark, William Bullock

1891. *Correlation papers: Eocene*. U.S. Geol. Sur., Bull. No. 83, 173 pp., maps
1895. *Contributions to the Eocene fauna of the middle Atlantic slope*. Johns Hopkins Univ. Circ., vol. 15, No. 121, pp. 3-6
1896. *The Eocene deposits of the middle Atlantic slope in Delaware, Maryland, and Virginia*. U.S. Geol. Sur., Bull., No. 141, 167 pp., 40 pls.
1898. *Collection of Eocene fossils*. Johns Hopkins Univ. Circ., vol. 18, No. 137, p. 18
1916. *Maryland Geological Survey, Upper Cretaceous*. Two vols., 1023 pp., 90 pls.

Clark, William Bullock, and Martin, George Curtis

1901. *Systematic paleontology, Eocene. Mollusca*. Pp. 122-203, pls. 17-57, in *Eocene*. Maryland Geol. Sur., 331 pp., 64 pls.

Clark, William Bullock, and Miller, Benjamin Le Roy

1912. *The physiography and geology of the Coastal Plain province of Virginia* with chapters on *The Lower Cretaceous* by Edward W. Berry and *The Economic Geology* by Thomas Leonard Watson. Virginia Geol. Sur., Bull. 4, pp. 13-222, 16 pls., 1 fig.

Clark, William Bullock, Miller, Benjamin LeRoy, Stephenson, Loyd William, Johnson, Bertrand Leroy, and Parker, Horatio Newton

1912. *The coastal plain of North Carolina*. North Carolina Geol. and Econ. Sur., Pub., vol. 3, 552 pp., 21 text figs., 42 pls.

Claypool, Chester Burns

1933. *The Wilcox of central Texas*. Abstract of thesis, Univ. of Illinois, Urbana, Illinois, 12 pp.

Collins, Robert E. Lee

1934. *A monograph of the American Tertiary pteropod mollusks*. Johns Hopkins Univ. Studies Geology, No. 11, pp. 137-243, pls. 7-14

Conrad, Timothy Abbott

1830. *On the geology and organic remains of a part of the peninsula of Maryland*. App. Containing descriptions of twenty-nine species of fossil shells, noticed in the preceding paper [pp. 217-231]. Acad. Nat. Sci. Philadelphia, Jour. 1st ser., vol. 6, pp. 205-231, pl. 9-10.

1832a. *Fossil shells of the Tertiary formations of North America, illustrated by figures drawn on stone by T. A. Conrad*. Vol. 1, No. 1, pp. 1-20, pls. 1-6. (Harris reprint, 1893, pp. 1-36, pls. 1-6; PRI reprint, 1963)

1832b. *Ibid.* Vol. 1, No. 2, pp. 21-28, pls. 7-14 (Harris reprint, 1893, pp. 37-48, pls. 7-14; PRI reprint, 1963)

1833a. *On some new fossils and Recent shells of the United States*. Amer. Jour. Sci., 1st ser., vol. 23, No. 2, Art. 17, pp. 339-346

1833b. *Fossil shells* (cont'd.) vol. 1, No. 3, pp. 29-38 (Harris reprint, 1893, pp. 49-62, PRI reprint, 1963)

1833c. *Ibid.* vol. 1, No. 4, pp. 39-46 (Harris reprint 1893, pp. 63-74; PRI reprint 1963)

1834. *Observations on the Tertiary and more recent formations of a portion of the southern states*. App. Descriptions of new Tertiary fossils from the southern states. [Pp. 130-157] Acad. Nat. Sci. Philadelphia, Jour., vol. 7, pp. 116-157

1834. Appendix in Morton, 1834, which see

1835a. *Fossil Shells* (Cont'd.) vol. 1, No. 3, pp. 29-56, pls. 15-18 (Harris reprint, 1893, pp. 77-110, pls. 15-18) also pls. 19-20 not included originally by Conrad. See PRI reprint, 1963.

1835b. *Observations on a portion of the Atlantic Tertiary region*. Geol. Soc. Pennsylvania, Trans., vol. 1, pp. 335-341, pl. 13

1837. *Descriptions of new marine shells from upper California. Collected by Thomas Nuttall, Esq.* Acad. Nat. Sci. Philadelphia, Jour., vol. 7, pp. 227-268, pls. 17-20

1838. *Fossils of the Medial Tertiary of the United States*. Pp. xvi + 32, pls. 1-17 (Dall reprint, 1893, pp. 1-52, pls. 1-17)

1840. *Fossil of the Medial Tertiary of the United States*. Pp. 33-56, pls. 18-29 (Dall reprint, 1893, pp. 53-80, pls. 18-29)

1841. *Descriptions of twenty-six new species of fossil shells, from Maryland etc.* Acad. Nat. Sci. Philadelphia, Proc. vol. 1, pp. 28-33

1841. See Hodge, J. T.

1842a. *Description of twenty-four new species of fossil shells, chiefly from the Tertiary deposits of Calvert Cliffs, Maryland*. Acad. Nat. Sci. Philadelphia, Jour., vol. 8, 1st ser., pp. 183-190

1842b. *Observations on a portion of the Atlantic Tertiary Region, with a description of new species of organic remains*. [Pp. 171-194, pls. 1, 2]. Descriptions of new Tertiary fossils. Lower Tertiary or Eocene fossils.

- Pp. 192-193. National Institution for the Promotion of Science, Washington, D.C., Proc., Bull. 2, pp. 171-194, pls. 1-2
1843. *Descriptions of a new genus and of twenty-nine new Miocene, and one Eocene fossil shells of the United States.* Acad. Nat. Sci. Philadelphia, Proc. 1843, vol. 1, Nos. 30-31, pp. 305-311
1844. *Descriptions of nineteen species of Tertiary fossils of Virginia and North Carolina.* Acad. Nat. Sci. Philadelphia, Proc. 1843, vol. 1, pp. 323-329
- 1845a. *Fossils of the Medial Tertiary of the United States.* Pp. 57- 80, pls. 30-45. (Dall reprint, 1893, pp. 81-106, pls. 30-45)
- 1845b. *Descriptions of the eight new fossil shells of the United States.* Acad. Nat. Sci. Philadelphia, Proc. 1844, vol. 2, No. 6, pp. 173-175
- 1846a. *Descriptions of new species of fossil and Recent shells and corals.* Acad. Nat. Sci. Philadelphia, Proc. 1846, vol. 3, No. 1, pp. 19-27, pl. 1
- 1846b. *Observations on the Eocene formations of the United States with descriptions of species of shells, etc., occurring in it.* (Part I). Amer. Jour. Sci., 2d ser., vol. 1, No. 2, Art. 7, pp. 209-221, pls. 1-2
- 1846c. *Ibid.* Part II. Amer. Jour. Sci., 2d ser., vol. 1, No. 3, pp. 395-405, pls. 3-4 [pl. 5 never printed]
- 1846d. *Descriptions of new species of organic remains from the upper Eocene limestone of Tampa Bay, Fla.* Amer. Jour. Sci., 2d ser., vol. 2, No. 6, Art. 37, pp. 399-400
- 1848a. *Observations on the Eocene formation and descriptions of one hundred and five new fossils of that period, from the vicinity of Vicksburg, Mississippi.* Acad. Nat. Sci. Philadelphia, Proc. 1847, vol. 3, pp. 280-299
- 1848b. *Observations on the Eocene formation, and descriptions of one hundred and five new fossils of that period, from the vicinity of Vicksburg, Mississippi.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 1, pt. 2, pp. 111-134, pls. 11-14
- 1848c. *Fossil shells from Tertiary deposits on Columbia River, near Astoria [Oregon].* Amer. Jour. Sci., 2d ser., vol. 5, pp. 432-433, figs. 1-14, [Dall reprint, 1909, U.S. Geol. Sur., Prof. Paper, No. 59, App. I, pp. 150-151, figs. 1-14]
1849. *Fossils from northwestern America; No. 4. Mollusca with notes by Dana.* U.S. Exploring Expedition . . . 1838-1842 . . . command of Charles Wilkes, U. S. N. Geology by James Dwight Dana, App. I, pp. 723-730, pls. 17-20. (Dall reprint 1909, U.S. Geol. Sur., Prof. Paper No. 59, App. II, pp. 153-157)
1850. *Descriptions of one new Cretaceous and seven new Eocene fossils.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 2, pp. 39-41, pl. 1
- 1853a. *Descriptions of new fossil shells of the United States.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 2, pp. 273-276, pl. 24 (Dall reprint, 1909, U.S. Geol. Sur., Prof. Paper No. 59, App. III, pp. 159-161)
- 1853b. *Notes on shells.* Acad. Nat. Sci. Philadelphia, Proc. 1853, vol. 6, pp. 320-321
- 1853c. *Synopsis of the genera Cassidula Humph. and of a proposed new genus Athleta.* Acad. Nat. Sci. Philadelphia, Proc. 1853, vol. 6, pp. 448-449
1854. *Rectifications of generic names of Tertiary fossil shells.* Acad. Nat. Sci. Philadelphia, Proc. 1854, vol. 7, pp. 29-31
1854. Conrad in Wailes. See Wailes, 1854
1855. *Descriptions of fossil shells from the Eocene and Miocene formations of California. Reports of explorations and surveys to ascertain . . . route for a railroad from the Mississippi River to the Pacific Ocean.* Pacific R.R. Report vol. V, pp. 320-329, pls. 2-9, [Dall reprint, 1909, U.S. Geol. Sur., Prof. Paper, No. 59, App., pp. 163-171]

- 1856a. *Observations on the Eocene deposits of Jackson, Mississippi, with descriptions of thirty-four new species of shells and corals.* Acad. Nat. Sci. Philadelphia, Proc. 1855, vol. 7, pp. 257-263. [Reprint Bull. Amer. Paleont., vol. 24, No. 86, 1939, pp. 3-9]
- 1856aa. *Descriptions of eighteen new Cretaceous and Tertiary fossils, from Texas, in the collection of Major Emory.* Acad. Nat. Sci. Philadelphia, Proc. 1855, vol. 7, pp. 265-268
- 1856b. *Descriptions of one Tertiary and eight new Cretaceous fossils from Texas in the collection of Major Emory.* Acad. Nat. Sci. Philadelphia, Proc. 1856, vol. 7, pp. 268-269
- 1856c. App. Article II. *Descriptions of the fossil shells.* Pp. 319-329, pls. 2-9 in Blake, William Phipps, Geological Report, Part II in *Report of Explorations in California for railroad routes . . .* Vol. 5, 370+ pp., 19 pls.
1857. *Descriptions of Cretaceous and Tertiary fossils.* Pp. 141-174, pls. 1-21 in Emory, William, H., *Report on the United States and Mexican Boundary Survey.* U.S. 34th Cong., 1st session, Senate Ex. Doc. 108 and House Ex. Doc. 135, vol. 1, part 2, 174 pp., 21 pls.
- 1858a. *Description of two new genera of shells.* Acad. Nat. Sci. Philadelphia, Proc. 1857, vol. 9, pp. 165-166
- 1858b. *Rectification of some of the generic names of American Tertiary fossils.* Acad. Nat. Sci. Philadelphia, Proc. 1857, vol. 9, p. 166
- 1858c. *Observations of a group of Cretaceous fossil shells, found in Tippah County, Miss., with descriptions of fifty-six new species.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 3, pp. 323-336, pls. 34-35
1860. *Description of new species of Cretaceous and Eocene fossils of Mississippi and Alabama.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 4, pt. 3, pp. 275-298, pls. 46-47
1861. *Fossils of the Medial Tertiary of the United States.* (Cont'd.) Pp. 81-89, pls. 46-49 (Dall reprint, 1893, pp. 109-117, pls. 46-49)
- 1863a. *Description of new genera, subgenera and species of Tertiary and Recent shells.* Acad. Nat. Sci. Philadelphia, Proc. 1862, vol. 14, pp. 284-291
- 1863b. *Catalogue of the Miocene shells of the Atlantic slope.* Acad. Nat. Sci. Philadelphia, Proc. 1862, vol. 14, pp. 559-582
1864. *Notes on shells, with descriptions of new fossil genera and species.* Acad. Nat. Sci. Philadelphia, Proc. 1864, vol. 16, pp. 211-214, 2 text figs.
- 1865a. *Catalogue of the Eocene and Oligocene Testacea of the United States.* Amer. Jour. Conch., vol. 1, No. 1, pp. 1-35, corrections pp. 190+
- 1865b. *Descriptions of new Eocene shells from Enterprise, Mississippi.* Amer. Jour. Conch., vol. 1, No. 2, pp. 137-141, pls. 10-11
- 1865c. *Descriptions of new Eocene shells of the United States.* Amer. Jour. Conch., vol. 1, No. 2, pp. 142-149, pl. 11
- 1865cc. *Catalogue of the older Eocene shells of Oregon.* Amer. Jour. Conch., vol. 1, No. 2, pp. 150-154
- 1865d. *Descriptions of new Eocene shells, and references with figures to published species.* Amer. Jour. Conch., vol. 1, No. 3, pp. 210-212, pls. 20-21 in part
- 1865e. *Descriptions of five new species of older Eocene shells from Shark River, Monmouth Co., N.J.* Amer. Jour. Conch., vol. 1, No. 3, pp. 213-215, pls. 20-21 in part
- 1865f. *Observations on the Eocene lignite formation of the United States.* Acad. Nat. Sci. Philadelphia, Proc. 1865, vol. 17, pp. 70-73. [Reprinted in Amer. Jour. Sci., see 1865h]
- 1865g. *Observations on American fossils, with descriptions of two new species.* Acad. Nat. Sci. Philadelphia, Proc. 1865, vol. 17, p. 184
- 1865h. *Observations of the Eocene lignite formation of the United States.*

- Amer. Jour. Sci., 2d ser., vol. 40, No. 119, pp. 265-268. [Reprint of Conrad, 1865f]
- 1865i. *Observations on certain Eocene fossils described as Cretaceous by Mr. W. M. Gabb in his report published in the "Paleontology of California."* Amer. Jour. Conch., vol. 1, No. 4, pp. 362-365
- 1866a. *Check list of invertebrates fossils of North America. Eocene and Oligocene.* Smithsonian Misc. Coll., vol. 7, No. 200, pp. 1-41
- 1866b. *Note on the genus Gadus with descriptions of some new genera and species of American fossil shells.* Amer. Jour. Conch., vol. 2, No. 1, pp. 75-78
- 1866c. *Further observations on Mr. Gabb's Paleontology of California.* Amer. Jour. Conch., vol. 2, No. 2, pp. 97-100
- 1866d. *Observations on Recent and fossil shells, with proposed new genera and species.* Amer. Jour. Conch., vol. 2, No. 2, pp. 101-103
- 1866e. *Descriptions of new species of Tertiary, Cretaceous and Recent shells.* Amer. Jour. Conch., vol. 2, No. 2, pp. 104-106, pls. 8-9
- 1867a. *Descriptions of new genera and species of fossil shells.* Amer. Jour. Conch., vol. 3, No. 1, pp. 8-16
- 1867b. *Synopsis of the genera Sycotypus Browne, and Busycon Bolten.* Amer. Jour. Conch., vol. 3, No. 2, pp. 182-185
- 1867c. *Notes on the fossil shells and description of new species.* Amer. Jour. Conch., vol. 3, No. 2, pp. 188-190
1868. *Appendix A. Synopsis of the invertebrate fossils of the Cretaceous formation of New Jersey.* Pp. 721-731. *Catalogue of Eocene shells and fish from Shark River.* Pp. 731-732 in Cook, G. H., *Geology of New Jersey.* Newark, 900 pp. [Not Meek as written in Whitfield, 1885, pp. 284-285, et al.]
- 1869a. *Descriptions of and references to Miocene shells of the Atlantic slope, and descriptions of two new supposed Cretaceous species.* Amer. Jour. Conch., vol. 4, No. 5, pp. 278-279, pls. 19-20, errata vol. 5, p. 227
- 1869b. *Descriptions of Miocene, Eocene and Cretaceous shells.* Amer. Jour. Conch., vol. 5, No. 1, pp. 39-45, pls. 1-2
- 1869c. *Observations on the genus Astarte, with descriptions of three other genera of Crassatellidae.* Amer. Jour. Conch., vol. 5, No. 1, pp. 46-48, pl. 9
1870. *Errata to Mr. Conrad's papers.* Amer. Jour. Conch., vol. 5, No. 4, p. 227
- 1870a. *Notes on Recent and fossil shells, with descriptions of new species.* Amer. Jour. Conch., vol. 6, No. 1, pp. 71-78, pls. 1, 3 in part
- 1871a. *Descriptions of new Tertiary fossils, with notes on two genera of Lamellibranchiata.* Amer. Jour. Conch., vol. 6, No. 3, pp. 199-201, pls. 11, 13 in part
- 1871b. *Paleontological notes. 2. Synopsis of the Eocene species of Catinus.* Amer. Jour. Conch., vol. 6, No. 4, p. 314, pl. 13 in part
- 1872a. *Descriptions and illustrations of genera of shells.* Acad. Nat. Sci. Philadelphia, Proc. 1872, vol. 24, pp. 50-55, pls. 1-2
- 1872b. *Descriptions of a new Recent species of Glycimeris from Beaufort, North Carolina and of Miocene shells of North Carolina.* Acad. Nat. Sci. Philadelphia, Proc. 1872, vol. 24, pp. 216-217, pl. 7
1875. *Descriptions of new genera and species of fossil shells of North Carolina in the State Cabinet of Raleigh . . . Report by W. C. Kerr, App. A, pp. 1-28, pls. 1-4 in W. C. Kerr, 1875 which see.*
1877. *Note of a Cirripede of the California Miocene, with remarks on fossil shells.* Acad. Nat. Sci. Philadelphia, Proc. 1876, vol. 28, pp. 273-275

Cook, George Hammell

1868. *Geology of New Jersey*. New Jersey Geol. Sur., 900 pp., map

Cooke, Charles Wythe

1915. *The age of the Ocala limestone*. U.S. Geol. Sur., Prof. Paper 95, pp. 107-117
 1918. *Deposits of Claiborne and Jackson age in Georgia*. U.S. Geol. Sur., Prof. Paper 120-C, pp. 41-81, map
 1919. *Tertiary mollusks from the Leeward Islands and Cuba*. Pp. 103-156, 16 pls. in Vaughan, T. W., *Contributions to the geology and paleontology of the West Indies*. Carnegie Inst. Washington, Pub. 291, 184 pp., 53 pls.
 1921. *Orthaulax, a Tertiary guide fossil*. U.S. Geol. Sur., Prof. Paper 129, pp. 23-37, 4 pls.
 1923. *The correlation of the Vicksburg group*. U.S. Geol. Sur., Prof. Paper 133, pp. 1-9
 1926a. *The Cenozoic formations*. Pp. 251-297, pls. 93-97 in Adams, George I., Butts, Charles, Stephenson, L. W., and Cooke, Charles Wythe, *Geology of Alabama*, Geol. Sur. Alabama, Special Report 14, 312 pp., 97 pls.
 1926b. *New Eocene mollusks from Jackson, Miss.* Washington Acad. Sci., Jour., vol. 16, No. 5, pp. 132-138, 1 pl.
 1936. *Geology of the Coastal Plain of South Carolina*. U.S. Geol. Sur., Bull. 867, 196 pp., 18 pls. incl. geol. maps, figs.
 1943. *Geology of the Coastal Plain of Georgia*. U.S. Geol. Sur., Bull. 941, 121 pp., pl. 1
 1945. *Geology of Florida*. Florida Geol. Sur., Bull. 29, 339 pp., 45 figs.

Cooke, Charles Wythe, and MacNeil, Francis Stearns

1952. *Tertiary stratigraphy of South Carolina*. U.S. Geol. Sur., Prof. Paper 243-B, pp. 19-29, fig. 2

Cooke, Charles Wythe, and Mossom, Stuart

1929. *Geology of Florida*. 12th Ann. Rept., Florida Geol. Sur., 237 pp., 29 pls.

Cooke, Charles Wythe, and Stephenson, Lloyd William

1928. *The Eocene age of the supposed late Upper Cretaceous Greensand marls of New Jersey*. Jour. Geol., vol. 36, pp. 139-148

Cope, Edward Drinker

1866. [Remarks on a species of *Aturia* found in the marl pits at Glassboro, N.J.] Acad. Nat. Sci. Philadelphia, Proc. 1866, vol. 18, pp. 3-4
 1867. On *Euclastis*, a genus of extinct *Cheloniidae*. Acad. Nat. Sci. Philadelphia, Proc. 1867, vol. 19, pp. 39-42

Cossmann, Alexandre Edouard Maurice

- 1887a-1913a. *Catalogue illustré des coquilles fossiles de l'Éocène des environs de Paris*. Ann. Soc. roy. Malacol. Belgique.
 1887a. *Pélécy-podes*. T. 22, ser. 4, t. 2, pp. 3-214, pls. 1-8
 1888a. *Scaphopodes et Gastropodes*. T. 23, ser. 4, t. 3, pp. 3-324, pls. 1-12
 1889a. T. 24, ser. 4, t. 4, pp. 3-381, pls. 1-12
 1893a. App. No. 1, t. 28, pp. 1-18, text figs.
 1896a. App. No. 2, t. 31, pp. 3-94, pls. 1-3

- [1901a] [1902a] App. No. 3, t. 36, pp. 9-110, pls. 2-7
 1906a. App. No. 4, t. 41, pp. 186-286, pls. 6-10
 1913a. App. No. 5, t. 49, pp. 19-238, pls. 1-8
 1892. [Review of *Monographie de la Faune Éocène de l'Alabama.*] Ann. Géol. Universel, t. 7, pp. 992-1004
 1893. *Notes complémentaires sur la faune Éocène de l'Alabama.* Ann. Géol. et Paléont., livr. 12, 51 pp., 2 pls.
 1895b-1925b. *Essais de Paléoconchologie comparée.* Paris, private, 13 livraisons
 1895b. Livr. 1, 159 pp., 7 pls.
 1896b. Livr. 2, 179 pp., 8 pls.
 1899b. Livr. 3, 201 pp., 8 pls.
 1901b. Livr. 4, 293 pp., 10 pls.
 1903b. Livr. 5, 215 pp., 9 pls.
 1904b. Livr. 6, 151 pp., 9 pls.
 1906b. Livr. 7, 261 pp., 14 pls.
 1909b. Livr. 8, 248 pp., 4 pls.
 1912b. Livr. 9, 215 pp., 10 pls.
 1916b. Livr. 10, 292 pp., 12 pls.
 1918b. Livr. 11, 388 pp., 11 pls.
 1921b. Livr. 12, 349 pp., 6 pls.
 1925b. Livr. 13, 345 pp., 11 pls.
 1895c. *Review of new or little known Tertiary Mollusca from Alabama and Texas by T. H. Aldrich.* Jour. Conchylol., vol. 43, pp. 183-187
 1897. ["Paléoconchologie et ouvrages généraux" by M. Cossmann]. Rev. crit. Paléozool., Ann. 1, No. 2, p. 59+ [Review of Cossmann, 1896a, which see]
 1899c. *Rectification de Nomenclature.* Revue Critique de Paléozoologie Ann. 3, No. 4, pp. 176-178

Costa, Emanuel Mendes da

1778. *Historia naturalis testaceorum Britanniae* . . . London, 254 pp., index, 17 pls.

Crick, George Charles

1890. See Foord, A. H., and Crick, G. C.

Crider, Albert Foster

1916. See Stephenson, L. W., and Crider, A. F.

Crosse, Joseph Charles Hippolyte

1861. *Étude sur le genre Cancellaire, suivie du catalogue des espèces vivantes et fossiles actuellement connus.* Jour. Conchylol., t. 9, 3d ser., t. 1, pp. 220-256
 1862. *Note sur l'Hipponyx Danieli, et catalogue des espèces du genre actuellement connues.* Jour. Conchylol., vol. 10, 3d ser., t. 2, pp. 17-28
 1894. *Review of Notes complémentaires sur la faune Éocène de l'Alabama par Maurice Cossmann.* Jour. Conchylol., vol. 42, 3d ser., t. 34, pp. 63-64

Curry, Dennis

1960. *New names for some common English lower Tertiary Mollusca.* Malacol. Soc. London, Proc., vol. 33, pt. 6, pp. 265-277

Cushman, Joseph Augustine

1907. *Types in the paleontological collections of the Boston Society of Natural History.* Boston Soc. Nat. Hist., Proc., vol. 33, No. 6, pp. 249-275

da Costa, Emanuel Mendes

See Costa, E. M. da

Dall, William Healey

- 1881a. *American work in the department of Recent Mollusca during the year 1880*. Amer. Nat., vol. 15, pp. 704-718
- 1881b. *Reports on the results of dredging under the supervision of Alexander Agassiz, in the Gulf of Mexico and in the Caribbean Sea, 1877-79, by the U.S. Coast Survey Steamer "Blake", Lieutenant Commander C. D. Sigsbee, U.S.M.* . . . Mus. Comp. Zool. Harvard, Bull., vol. 9, No. 2, pp. 33-144
1889. *Reports on the results of dredging under the supervision of Alexander Agassiz, in the Gulf of Mexico (1877-78) . . . by the U.S. Coast Survey Steamer "Blake", . . . XXIX Report on the Mollusca*. Mus. Comp. Zool. Harvard, Bull. vol. 18, 492 pp., pls. 10-40
1890. *Tertiary fauna of Florida*. . . Wagner Free Inst. Sci. Philadelphia, Trans., vol. 3, pt. 1, pp. 1-200, pls. 1-12
1892. *Ibid.*, vol. 3, pt. 2, pp. 201-473, pls. 13-22
- 1895a. *Synopsis of a review of the genera of Recent and Tertiary Macridae and Mesodesmatidae*. Malacol. Soc. London, Proc., vol. 1, No. 5, pp. 203-213
- 1895b. *Tertiary fauna of Florida* (cont'd.). *Ibid.*, Vol. 3, pt. 3, pp. 475-570
- 1896a. *On some new species of Scala*. Nautilus, vol. 9, No. 10, pp. 111-112
- 1896b. *Diagnoses of new Tertiary fossils from the southern United States*. U.S. Nat. Mus., Proc., vol. 18, pp. 21-46
- 1898a. *A new subgenus of Coralliophaga*. Nautilus, vol. 11, No. 12, p. 135
- 1898b. *Tertiary fauna of Florida* (cont'd.). *Ibid.*, Vol. 3, pt. 4, pp. 571-948, pls. 23-35
- 1898c. *Synopsis of the Recent and Tertiary Psammobiidae of North America*. Acad. Nat. Sci. Philadelphia, Proc. 1898, vol. 50, pp. 57-62
1899. *Synopsis of the Recent and Tertiary Leptonacea of North America and the West Indies*. U.S. Nat. Mus., Proc., vol. 21, No. 1177, pp. 871-897, pls. 87-88
1900. *Tertiary fauna of Florida* (cont'd.). *Ibid.*, Vol. 3, pt. 5, pp. 949-1217, pls. 37-47
- 1900a. *Synopsis of the family Tellinidae and of the North American species*. U.S. Nat. Mus., Proc., vol. 23, No. 1210, pp. 285-326, pls. 2-4
- 1901a. *Synopsis of the family Cardiidae and of the North American species*. U.S. Nat. Mus., Proc., vol. 23, No. 1214, pp. 381-392
- 1901b. *A gigantic fossil Lucina*. Nautilus, vol. 15, pp. 40-42
- 1901c. *Synopsis of the Lucinacea and of the American species*. U.S. Nat. Mus., Proc., vol. 23, No. 1237, pp. 779-833, pls. 39-42
1902. *Synopsis of Veneridae and of the North American species*. U.S. Nat. Mus., Proc., vol. 26, No. 1312, pp. 335-412
- 1903a. *Tertiary fauna of Florida* (cont'd.) *Ibid.*, Vol. 3, pt. 6, pp. 1219-1654, pls. 48-60
- 1903b. *Synopsis of the family Astartidae with a review of the American species*. U.S. Nat. Mus., Proc., vol. 26, No. 1342, pp. 933-952, pls. 62-63
1904. *A singular Eocene Turbinella*. Nautilus, vol. 18, No. 1, pp. 9, 10
1907. *Notes on some Upper Cretaceous Volutidae with descriptions of new species and a revision of the groups to which they belong*. Smithsonian Misc. Coll., vol. 50, pt. 1, 23 pp., 12 figs.
1909. *Contributions to the Tertiary paleontology of the Pacific Coast. 1. The Miocene of Astoria and Coos Bay, Oregon*. U.S. Geol. Sur., Prof. Paper 59, 148 pp., 23 pls. Appendices I-XIII, pp. 149-216, Index pp. 263-278

1915. *A monograph of the molluscan fauna of the Orthaulax pugnax zone of the Oligocene of Tampa, Florida*. U.S. Nat. Mus., Bull. 90, 173 pp., 26 pls.

1916. *A contribution to the invertebrate fauna of the Oligocene beds of Flint River, Georgia*. U.S. Nat. Mus., Proc., vol. 51, No. 2162, pp. 487-524, 6 pls.

Dall, William Healey, and Bartsch, Paul

1904. *Synopsis of the genera, subgenera, and sections of the family Pyramidellidae*. Biol. Soc. Washington, Proc., vol. 17, 16 pp.

1909. *A monograph of west American pyramidellid mollusks*. U.S. Nat. Mus., Bull. 68, 258 pp., 30 pls.

Dana, James Dwight

1863. *Manual of geology*. 1st ed., Philadelphia, 798 pp., il. map

1895. *Ibid.*, 4th ed., Boston, 1087 pp., il. map

Day, James R.

1937. See Lonsdale, J. T., and Day, J. R.

DeFrance, Marin Jacques Louis

1816-1830. *Dictionnaire des Sciences Naturelles* . . . Paris and Strasbourg.

1821. Hep-Huis, 540 pp.

de Gregorio, Antoine

See Gregorio, Antoine de

Deshayes, Gérald Paul

1824-1832. *Descriptions des Coquilles fossiles des environs de Paris*. Tome I. *Conchifères*, 392 pp.

1824. pp. 1-80

1825. pp. 81-170

1829. pp. 171-238

1830. pp. 239-322

1832. pp. 323-392

1824a-1835a. *Ibid.* Tome II. *Gasteropodes*, 780 pp.

1824a. pp. 1-80

1825a. pp. 81-146

1832a. pp. 147-290

1833a. pp. 291-426

1834a. pp. 427-498

1835a. pp. 499-780

Plates published simultaneously with text. Dates from Newton, 1891, p. 309

1833-[1835]. [*Mollusca of the Morea*]. *Expédition scientifique de Morée*. (Bory de Saint Vincent). T. III, pt. 1, sect. 1, 209 pp., Atlas

1838-1851. *Histoire naturelle générale et particulière des Mollusques terrestres et fluviatiles* . . . Paris, t. 2, pt. 2, Nos. 29-42. See under Férussac, A. E.

1856-1866. *Description des Animaux sans vertèbres découverts dans le bassin de Paris pour servir de supplément à la description des coquilles fossiles des environs de Paris, comprenant une revue générale de toutes les espèces actuellement connues*. Paris, 3 vol. text. 2 vol. atlas

1856. Vol. 1, pp. 1-80

Atlas Vol. 1, pls. 1-10

1857. *Ibid.*, pp. 81-392

Ibid., Vol. 1, pls. 11-49

- | | |
|---|------------------------------------|
| 1858. <i>Ibid.</i> , pp. 393-704 | <i>Ibid.</i> , Vol. 1, pls. 50-87 |
| 1860. <i>Ibid.</i> , pp. 70-912 | |
| 1861. Vol. 2, pp. 1-432 | Vol. 2, pls. 1-26 |
| 1862. <i>Ibid.</i> , pp. 433-640 | <i>Ibid.</i> , Vol. 2, pls. 27-39 |
| 1863. <i>Ibid.</i> , pp. 641-920 | <i>Ibid.</i> , Vol. 2, pls. 40-62 |
| 1864. <i>Ibid.</i> , pp. 921-968 | |
| 1865a. Vol. 3, pp. 1-200 | <i>Ibid.</i> , Vol. 2, pls. 63-85 |
| 1865b. <i>Ibid.</i> , pp. 201-658 | <i>Ibid.</i> , Vol. 2, pls. 86-107 |
| 1866. <i>Ibid.</i> , Index, Title-page etc. | |
- For true dates of publication, see Newton, 1891, p. 309

Deussen, Alexander

1914. *Geology and underground waters of the southeastern part of the Texas Coastal Plain*. U.S. Geol. Sur., Water-Supply Paper 335, 365 pp., maps
 1924. *Geology of the Coastal Plain of Texas West of Brazos River*. U.S. Geol. Sur., Prof. Paper 126, 145 pp., 35 pls.

Dickerson, Roy Ernest

1914. *Fauna of the Martinez Eocene of California*. Univ. California Pub., Bull. Geol. Dept., vol. 8, No. 6, pp. 61-180, pls. 6-18
 1916. *Stratigraphy and fauna of the Tejon Eocene of California*. Univ. California Pub., Bull. Geol. Dept., vol. 9, No. 17, pp. 363-524, pls. 36-46

Dietrich, John W.

1964. See Fisher, W. L., Rodda, P. U., and Dietrich, J. W.

Dixon, Frederick

1850. *The geology of Sussex or the geology and fossils of the Tertiary and Cretaceous formations of Sussex*. Pp. xvi-422, 45 pls.
 1878. *Ibid.* new ed. 2d by T. R. Jones. Pp. xxiv-469, 64 pls.

Dixon, Frederick, and Jones, Thomas Ruppert

1878. See under Dixon, F.

Donovan, Edward

- [1799]-1804. *The natural history of British shells*. Five vols. in 2. 1799, parts 1-6; 1800, parts 7-18; 1801, parts 19-30; 1802, parts 31-42, vol. 4; parts 43-54; 1804, parts 55-60

Douvillé, Henri

1904. *Paléontologie Mollusques Fossiles* in J. de Morgan, *Mission Scientifique en Perse*. Vol. 3, *Études géologiques*. Partie IV. *Paléontologie Mollusques fossiles*. Pp. 191-380, pls. 25-50
 1910. *Observations sur les Ostréidés origine et classification*. Soc. géol. France, Bull., 4th ser., t. 10, pp. 634-645

Downs, Harold Robert

1950. See Miller, A. K., and Downs, H. R.

DuBar, Jules Ramon, and Salliday, James R.

1961. *Check list of Duplin (late Miocene) molluscan species of Georgia and the Carolinas*. Geologic Notes. Div. Geology State Development Board, Columbia, S.C. Vol. 5, No. 2, pp. 17-30

Duclos, P. L.

1835. *Histoire Naturelle . . . de tous les genres de coquilles univalves marines à l'état vivant et fossile . . . Genre Olive*. 33 pls. [no. p. nos.]
1843-1853. [1844] *Illustrations conchyliologiques . . .* [Chenu] *Olive*, 31 pp., 36 pls.

Dumble, Edwin Theodore

1894. *The Cenozoic deposits of Texas*. Jour. Geol., vol. 2, No. 6, pp. 549-567
1908. *Tertiary deposits of northeastern Mexico*. Science, n. s., vol. 27, p. 273
1911. *Rediscovery of some Conrad forms*. Science, n. s., vol. 33, No. 860, pp. 970-971
1915a. *Some events in the Eocene history of the present coastal area of the Gulf of Mexico in Texas and Mexico*. Jour. Geol., vol. 23, No. 6, pp. 481-498
1915b. *Problem of the Texas Tertiary sands*. Geol. Soc. America, Bull., vol. 26, pp. 447-476, pls. 25-27
1920. *Geology of East Texas*. Univ. Texas, Bull. 1869, vii+388 pp., 12 pls.

Dunker, Wilhelm Bernhard Rudolph Hadrian

- 1858-1870. [1871]. *Novitates Conchologicae. Mollusca Marina. Abbildung und Beschreibung . . . neuer . . . Conchylien*, II. Abt.; *Meeres Conchylien*. Herausgegeben von Dr. W. Dunker, Cassel, pp. iv + 144, 45 pls.

Edwards, Frederic Erasmus

- 1849-1860. *A monograph of the Eocene Mollusca, or descriptions of shells from the older Tertiaries of England*. Paleont. Soc. London, Mon.
1849. Part I, pp. 1-56, pls. 1-9
1852. Part II, pp. 57-122, pls. 10-15
1854-1860. Part III, pp. 123-330, pls. 16-33
1865. *Descriptions of some new Eocene species of Cypraea and Marginella*. Geol. Mag., vol. 2, pp. 536-542, pl. 14

Emerson, William Keith, and Puffer, Elton L.

1953. *A catalogue of the molluscan genus Distorsio (Gastropoda, Cymatidae)*. Biol. Soc. Washington, Proc., vol. 66, pp. 63-108

Emmons, Ebenezer

1858. *Report of the North Carolina Geological Survey. Agriculture of the eastern counties; . . .* Raleigh, 314 pp., 256 text ill.

Emory, William Hemsley

1857. *Report on the United States and Mexican boundary survey . . .* United States 34th Congress, 1st sess., Senate Ex. Doc. 108 and House Ex. Doc. 135, vol. 1, Part 2, 174 pp., 21 pls. maps

Férussac, André Etienne J. P. J. F. d'Audebard

- 1819-1832. *Histoire naturelle générale et particulière des Mollusques terrestres et fluviatiles . . .* Paris, t. 2, pt. 1, Nos. 1-28, 128 pp., 162 pls.
1838-1851. *Ibid.*, t. 2, pt. 2, cont'd. by Deshayes, G. P., Nos. 29-42

Finch, John

1824. *Geological essay on the Tertiary formations in America*. Amer. Jour. Sci., 1st ser., vol. 7, pp. 31-43

Finlay, Harold John

1926. *A further commentary on New Zealand molluscan systematics*. New Zealand Inst., Trans. vol. 57, pp. 320-485, pls. 18-22

Fischer, de [von] Waldheim, Gotthelf

1807. *Muséum Demidoff. . . Ou catalogue systématique . . . a l'Université impériale de Moscou par son Excellence Monsieur Paul de Demidoff*. T. 3, *Végétaux et Animaux*. Pp. 281, 6 pls.

Fischer, Paul

1860. *Note sur les genres Hippagus et Verticordia*. Jour. Conchyl., vol. 8, 2d ser., vol. 4, pp. 295-300
 1880-1887. *Manuel de conchyliologie et de paléontologie conchyliologique* . . . Paris, pp. 1369, 33 pls. For dates according to pages see Newton, R. B., 1891, p. 311

Fisher, William L.

1961. *Stratigraphic names in the Midway and Wilcox groups of the Gulf Coast Plain*. [Reprinted from Gulf Coast Association of Geological Societies. Vol. 11, pp. 263-295]. Bur. Ec. Geol., Univ. Texas. Report of Investigations, No. 44 same pp.

Fisher, William L., and Rodda, Peter Ulisse

1961. *Athleta petrosa stock from the Eocene of Texas*. Annual Meetings, Geol. Soc. America abstracts. Abstract pp. 52A-53A

Fisher, William L., Rodda, Peter Ulisse, and Dietrich, John W.

1964. *Evolution of Athleta petrosa stock (Eocene, Gastropoda) of Texas*. Univ. Texas Pub. No. 6413, 117 pp., 11 pls.

Fitton, William Henry

1835. *Observations on some of the strata between the chalk and the Oxford Oolite, in the south-east of England*. Geol. Soc. London, Trans., 2d ser., vol. 4, pp. 103-338, pls. 11-23. App. A, see Sowerby, James de Carle

Foord, Arthur Humphreys, and Crick, George Charles

1890. *On some new and imperfectly defined species of Jurassic, Cretaceous, and Tertiary Nautili contained in the British Museum (Natural History)*. Ann. Mag. Nat. Hist., 6th ser., vol. 5, pp. 388-409

Forbes, Edward

1845. *Description of new species*. App. I. Pp. 61-63, text figs. in Lyell, Charles, *Notes on the Cretaceous strata of New Jersey, and other parts of United States bordering the Atlantic*. Quart. Jour. Geol. Soc. London, vol. 1, pp. 55-75 text figs.

Forbes, Edward, and Hanley, Sylvanus Charles Thorp

- 1848-1853. *A history of British Mollusca, and their shells*. London, 4 vols.

1848. Vol. 1, 477 pp., pls. A-O, 1-34
1850. Vol. II, 557 pp., pls. P-U, AA-NN, 35-74, 77-79
1851. Vol. III, 616 pp., pls. EE-ZZ, 75-76, 80-94D
1853. Vol. IV, 557 pp. pls. W, MM, AAA-SSS, 94E-133

Furnish, William Madison, Jr.

1938. See under Miller, A. K., and Furnish, W. M., Jr.

Gabb, William More

- 1860a. *Descriptions of some new species of Cretaceous fossils.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 4, pt. 3, pp. 299-305, pls. 47-48 in part
1860b. *Descriptions of new species of Cretaceous fossils from New Jersey.* Acad. Nat. Sci. Philadelphia, Proc. 1860, vol. 12, pp. 93-95
1860c. *Description of a new species of cephalopod from the Eocene of Texas.* Acad. Nat. Sci. Philadelphia, Proc. 1860, vol. 12, p. 324
1860d. *Descriptions of new species of American Tertiary and Cretaceous Fossils.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 4, pt. 4, pp. 375-406, pls. 67-69
1861. *Synopsis of the Mollusca of the Cretaceous formation, including the geographical and stratigraphical range and synonymy.* Amer. Philos. Soc., Proc. 1861, vol. 8, pp. 57-257
1862a. *Descriptions of new species of Cretaceous fossils from New Jersey, Alabama, and Mississippi.* Acad. Nat. Sci. Philadelphia, Proc. 1861, vol. 13, pp. 318-330
1862b. *Notes on Cretaceous fossils with descriptions of a few additional new species.* Acad. Nat. Sci. Philadelphia, Proc. 1861, vol. 13, pp. 363-367
1862c. *Descriptions of new species of American Tertiary fossils and a new Carboniferous cephalopod from Texas.* Acad. Nat. Sci. Philadelphia, Proc. 1861, vol. 13, pp. 367-372
1864. *Description of the Cretaceous fossils. Paleontology of California,* vol. 1, section 4, pp. 57-243
1866. *Reply to Mr. Conrad's criticism on Mr. Gabb's "Report on the paleontology of California."* Amer. Jour. Conch., vol. 2, pp. 87-92
1868. *An attempt at a revision of the two families Strombidae and Aporrhaidae.* Amer. Jour. Conch., vol. 4, pp. 137-149, 2 pls.
1869. *Cretaceous and Tertiary fossils.* California Geol. Sur., Paleontology, vol. 2, 299 pp., 36 pls.
1872. *Notes on the genus Polorthus Gabb.* Acad. Nat. Sci. Philadelphia, Proc. 1872, vol. 24, pp. 259-262, pl. 8
1873. *On the topography and geology of Santo Domingo.* Amer. Philos. Soc., Trans., n.s. vol. 15, pt. 1, pp. 49-259, map
1877. *Notes on American Cretaceous fossils, with descriptions of some new species.* Acad. Nat. Sci. Philadelphia, Proc. 1876, vol. 28, pp. 276-324, pl. 5

Gardner, Julia Anna

1923. *New species of Mollusca from the Eocene deposits of southwestern Texas.* U.S. Geol. Sur., Prof. Paper 131-D, pp. 109-115, pls. 29-33
1924. *Fossiliferous marine Wilcox in Texas.* Amer. Jour. Sci., 5th ser., vol. 7, pp. 141-145
1924. *In* Deussen, Alexander, which see
1926a. *The molluscan fauna of the Alum Bluff group of Florida. Part I. Prionodesmacea and Anomalodesmacea.* U.S. Geol. Sur., Prof. Paper 142-A, 64 pp., 15 pls.

- 1926b. *The nomenclature of the superspecific groups of Corbula in the lower Miocene of Florida*. Nautilus, vol. 40, No. 2, pp. 41-47
- 1926c. *On Scott's new correlation of the Texas Midway*. Amer. Jour. Sci., 5th ser., vol. 12, pp. 453-455
- 1926d. *The restoration of Ostrea multilirata Conrad, 1857*. Washington Acad. Sci., Jour., vol. 16, No. 19, pp. 513-514
1927. *New species of mollusks from the Eocene of Texas*. Washington Acad. Sci., Jour., vol. 17, No. 14, pp. 362-383, figs. 1-44
- 1927a. *The correlation of the marine Yegua of the type sections*. Jour. Paleont., vol. 1, No. 3, pp. 245-251
1928. *The molluscan fauna of the Alum Bluff group of Florida*. Part V. Tellinacea, Solenacea, Mactracea, Myacea, Molluscoidea. U.S. Geol. Sur., Prof. Paper 142-E, pp. 185-249, pls. 29-36
1929. *A new Eocene Leda from Black Bluff, Ala.* Washington Acad. Sci., Jour., vol. 19, No. 19, pp. 425-428, 1 fig.
1931. *Relation of certain foreign faunas to Midway fauna of Texas*. Amer. Assoc. Petrol. Geol., Bull., vol. 15, pp. 149-160
1935. *The Midway group of Texas, including a chapter on the coral fauna by Thomas Wayland Vaughan and Willis Parkinson Popenoe*. Univ. Texas Bull. 3301, 403 pp., 28 pls., 4 text figs.
1938. *Lesueur's Walnut Hills fossil shells*. Jour. Paleont., vol. 12, No. 3, pp. 300-301
1939. *Recent collections of upper Eocene Mollusca from Alabama and Mississippi*. Jour. Paleont., vol. 13, No. 3, pp. 340-343
- 1939a. *Notes on fossils from the Eocene of the gulf province*. U.S. Geol. Sur., Prof. Paper 193-B, pp. 17-44, pls. 1-8
1944. *Mollusca from the Miocene and lower Pliocene of Virginia and North Carolina; Part I, Pelecypoda; with a summary of the stratigraphy by W. C. Mansfield*. U.S. Geol. Sur., Prof. Paper 199-A, 178 pp., 23 pls., 4 text figs.
1945. *Mollusca of the Tertiary formations of northeastern Mexico*. Geol. Soc. America, Mem. 11, 332 pp., 28 pls., map, 6 tables, 1 fig.
1951. *Two new guide fossils from the Tallahatta formation of the southeastern states*. Washington Acad. Sci., Jour., vol. 41, No. 1, pp. 8-12

Gardner, Julia Anna, and Bowles, Edgar Oliver

1934. *Early Tertiary species of gastropods from the Isthmus of Tehuantepec*. Washington Acad. Sci., Jour., vol. 24, No. 6, pp. 241-248
1939. *The Venericardia planicosta group in the Gulf Province*. U.S. Geol. Sur., Prof. Paper 189-F, pp. 141-215, pls. 33-46

Geinitz, Hans Bruno

1887. *Über Nautilus alabamensis Morton, Nautilus ziczac Sow. und Nautilus lingulatus v. Buch*. Neues Jahrb. für Min. Geol. Pal., Bd. 2, pp. 53-56, pl. 3

Gibbes, Robert Wilson

1845. *Description of the teeth of a new fossil animal found in the green-sand of South Carolina*. Acad. Nat. Sci. Philadelphia, Proc. 1845, vol. 2, pp. 254-256, pl. 1

Gildersleeve, Benjamin

1942. *Eocene of Virginia*. Virginia Geol. Sur., Bull. No. 57, 43 pp., pls. 1-6

Gimbrede, Louis de Agramonte

1962. *The Hurricane lentil: source of many Claiborne fossils*. Jour. Paleont., vol. 36, No. 5, pp. 1116-1120

Glenn, Leonidas Chalmers

1904. *Systematic paleontology. Pelecypoda*. Pp. 274-401, pls. 75-108, in Maryland Geological Survey. Miocene. Two vols., 543 pp., 135 pls.

Glibert, Maxine

- 1960a. *Les Volutacea fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 61, 109 pp.
 1960b. *Les Conacea fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 64, 132 pp.
 1962a. *Les Archaeogastropoda fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 68, 131 pp.
 1962b. *Les Mesogastropoda fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 69, 305 pp.
 1962c. *Les Euthyneura et Pulmonata fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 70, 140 pp.
 1963a. *Les Mesogastropoda fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem. 10th ser., fasc. 73, 154 pp.
 1963b. *Les Muricacea et Buccinacea fossiles du Cenozoïque Étranger* . . . Inst. roy. des Sci. Nat. de Belgique, Mem., 10th ser., fasc. 74, 179 pp.

Gmelin, Johann Friedrich

1791. *Caroli a Linné Systema Naturae*. Ed. 13, t. I, pars VI, *Vermes*, pp. 2 + 3021-3910. For date see Hopkinson, John, 1907, pp. 1035-1036

Goldfuss, Georg August

1833. *Petrefacta Germaniae* . . . theil 2, Div. 4, pp. 1-68, pls. 72-96
 1862. *Ibid.*, ed. 2, 113 pp.

Grabau, Amadeus William

1901. See under Johnson, C. W., and Grabau, A.W.
 1903. *Studies of Gastropoda*. II. *Fulgur* and *Sycotypus*. Amer. Nat., vol. 37, pp. 515-539
 1904. *Phylogeny of Fusus and its allies*. Smithsonian Misc. Coll., vol. 44, No. 1417, 192 pp., 18 pls.
 1935. *Studies of Gastropoda*. National University Peking, Peking, pp. 159, 3 pls.

Grabau, Amadeus William, and Shimer, Hervey Woodburn

1909. *North American index fossils: Invertebrates*. New York, vol. 1, 853 pp., 1210 figs.
 1910. *Ibid.*, vol. 2, 909 pp., 1937 figs.

Grateloup, Jean Pierre Sylvestre de

1833. X. *Tableau (suite du) des Coquilles fossiles que on rencontre dans les terrains tertiaires grossiers (faluns), des environs de Dax, département des Landes*. Actes de la Société Linnéenne de Bordeaux, t. 6, No. 32, pp. 90-164
 1837. VII. *Notice sur la famille des Bulléens dont on trouve les dépouilles fossiles dans les terrains marins supérieurs du bassin de l'Adour, aux environs de Dax (Landes)*. Actes de la Société Linnéenne de Bordeaux, t. 9, No. 49 bis, pp. 365-432, pl. 3
 1838. XII. *Description des genre et des espèces de coquilles fossiles, appartenant à cette famille de Trachélipodes qu'on observe dans les couches des terrains marins supérieurs du bassin de l'Adour aux*

~environs de Dax (Landes). Actes de la Société Linnéenne de Bordeaux, t. 10, No. 53, pp. 251-302, pl. 6

1840. *Conchyliologie fossile des terrains Tertiaires du bassin de l'Adour, (environs de Dax), Univalves. Atlas.* Bordeaux, t. 1, 12 pp., 48 pls.

Gray, John Edward

1847. *A list of the genera of Recent Mollusca, their synonyma and types.* Zool. Soc. London, Proc., pt. 15, pp. 129-219

Gregorio, Antoine de

1885. *Studi su talune conchiglie Mediterranee. Viventi e fossili con una rivista del gen. Vulsella.* Paragrafi. *Intorna a talune specie appartenenti ai gen. Modiolaria, Montacuta, Astarte, Cista e Lucina.* Bull. Soc. Malacol., vol. 10, pp. 125-218

1890. *Monographie de la Faune-Eocène de l'Alabama et surtout de celle de Claiborne de l'Étage Parisien (Horizon à Venericardia planicosta Lamk.).* Ann. Géol. et Paléont., livr. 7 et 8, 316 pp., 46 pls.

Guillaume, Louis

1924. *Essais sur la classification des Turritelles, ainsi que sur leur évolution et leurs migrations, depuis le début des temps Tertiaires.* Soc. géol. France, Bull. 4th ser., t. 14, fasc. 5, pp. 281-311, 2 pls.

1926. *Réponse à la note de Mr. G. F. Dollfus: "Critique de la classification des Turritelles."* Soc. géol. France, Bull. 4th ser., t. 26, fasc. 6-8, pp. 425-428

Guppy, Robert John Lechmere

1866. *On the Tertiary Mollusca of Jamaica.* Quart. Jour. Geol. Soc. London, Proc., pp. 281-295, pls. 16-18

Hall, James

1843. *Geology of New York.* Part IV. Comprising the survey of the fourth geological district. Albany, N.Y., 683 pp.

Hanley, Sylvanus Charles Thorp

1844. [. . . new species of the genus *Tellina*, chiefly collected by H. Cuming Esq. in the Philippine Islands and Central America.] Zool. Soc. London, Proc. 1844, vol. 12, pp. 59-72

1848. See under Forbes, E., and Hanley, S. C. T.

1855. *Ipsa Linnaei Conchylia. The shells of Linnaeus, determined from his manuscripts and collections . . . also an exact reprint of the Vermes Testacea of the "Systema Naturae" and "Mantissa."* London, 556 pp., 5 pls.

Hanna, G. Dallas

1924. *Rectifications of nomenclature.* California Acad. Sci., Proc., 4th ser., vol. 13, No. 10, pp. 151-186

Hannibal, Harold

1914. See under Arnold, R., and Hannibal, H.

Harbison, Anne

1944. *Mollusks from the Eocene Santee limestone, South Carolina.* Acad. Nat. Sci. Philadelphia, Not. Nat., No. 143, 12 pp., 4 pls.

1953. See Olsson, A. A., and Harbison, A.

Harmer, Frederic William

1914-1925. *The Pliocene Mollusca of Great Britain being supplementary to S. V. Wood's monograph of the Crag Mollusca.*

1914. Vol. 1, pt. 1 in Paleont. Soc., vol. 67, pp. 1-200, 24 pls., issued for 1913

1915. Vol. 1, pt. 2, *ibid.*, vol. 68, pp. 201-302, pls. 25-32, issued for 1914

1918. Vol. 1, pt. 3, *ibid.*, vol. 70, pp. 303-461, pls. 33-44, issued for 1916

1919. Vol. 1, pt. 4, *ibid.*, vol. 71, pp. 462-483, index, issued for 1917

1920. Vol. 2, pt. 1, *ibid.*, vol. 72, pp. 485-652, pls. 45-52, issued for 1918

1921. Vol. 2, pt. 2, *ibid.*, vol. 73, pp. 653-704, pls. 53-56, issued for 1919

1923. Vol. 2, pt. 3, *ibid.*, vol. 75, pp. 705-856, pls. 57-64, issued for 1921

1925. Vol. 2, pt. 4, *ibid.*, vol. 76, pp. 857-900, pl. 65, issued for 1922

Harris, George Frederick

1894. See under Newton, R. B., and Harris, G. F.

Harris, George Frederick, and Burrows, Henry William

1891. *The Eocene and Oligocene beds of the Paris Basin.* Geologists' Association, London, 129 pp.

Harris, Gilbert Dennison

1890. *The genus Terebellum in American Tertiaries.* Amer. Geol., vol. 5, p. 319

1892. In Lerch, Otto, 1892, which see

1893. Reprint of *Fossil shells of the Tertiary formations of North America* by T. A. Conrad. See Conrad, 1832a-1835a (PRI reprint, 1963)

1893a ms. Manuscript *Eocene of Texas*. Pp. 181 + lists "stations Texas museums," never published. Deposited in PRI Library, many of the new species were published by Harris, 1895a, which see

1894a. *On the geological position of the Eocene deposits of Maryland and Virginia.* Amer. Jour. Sci., 3d ser., vol. 47, pp. 301-304, figs. 1-3

1894b. *The Tertiary geology of southern Arkansas.* Arkansas Geol. Sur., Ann. Report for 1892, vol. 2, 207 pp., 7 pls.

1895. Pages 887-892, 896-900, figs. in Dana, James Dwight, *Manual of Geology*, which see

1895a. *New and otherwise interesting Tertiary Mollusca from Texas.* Acad. Nat. Sci. Philadelphia, Proc. 1895, vol. 47, pp. 45-88, pls. 1-9

1895b. *Claiborne fossils.* Bull. Amer. Paleont., vol. 1, No. 1, 52 pp., pl. 1

1895c ms. *Catalogue of Isaac Lea's Tertiary fossils. Formerly arranged by Angelo Heilprin.* Rearranged in Aug., 1895. Not published. Harris original notebook in PRI.

1896. *The Midway stage.* Bull. Amer. Paleont., vol. 1, No. 4, 156 pp., 15 pls.

1897a. *New and interesting Eocene Mollusca from the Gulf states.* Acad. Nat. Sci. Philadelphia, Proc. 1896, vol. 48, pp. 470-482, pls. 18-23

1897b. *The Lignitic stage, Part I, stratigraphy and Pelecypoda.* Bull. Amer. Paleont., vol. 2, No. 9, 102 pp., 14 pls.

1899a. *The Lignitic stage, Part II, Scaphopoda, Gastropoda, Pteropoda and Cephalopoda.* Bull. Amer. Paleont., vol. 3, No. 11, 128 pp., 12 pls.

1899b. *The Cretaceous and lower Eocene faunas of Louisiana.* Pp. 289-310, pls. 49-55. Special Report in Harris and Veatch, which see

1902. *Eocene outcrops in central Georgia.* Bull. Amer. Paleont., vol. 4, No. 16, 7 pp.

1919. *Pelecypods of the St. Maurice and Claiborne stages.* Bull. Amer. Paleont., vol. 6, No. 31, 268 pp., 59 pls.

1919. See under Van Winkle, K. E. H., and Harris, G. D.

1920. *The genera Lutetia and Alveinus.* Paleont. Amer., vol. 1, No. 2, pp. 3-14, pl. 17, text figs. 1-8

1926. *With notes on the paleontology*. Pp. 87-112, pls. 17-20 in Waring, Gerald Ashley. *The geology of the island of Trinidad*, B. W. I. Johns Hopkins Univ. Studies in Geology, No. 7, 180 pp., 20 pls.
1927. See under Hodson, Floyd, Hodson, H. K., and Harris, G. D.
1937. *Turrid illustrations*. Paleont. Amer., vol. 2, No. 7, 122 pp., 14 pls.
1940. *The name Claiborne in geologic literature*. Science, n.s., vol. 92, No. 2386, pp. 257-258
1951. *Preliminary notes on Ocala bivalves*. Bull. Amer. Paleont., vol. 38, No. 138, 54 pp., 13 pls.

Harris, Gilbert Dennison, and Palmer, Katherine Van Winkle

- 1946, 1947. *The Mollusca of the Jackson Eocene of the Mississippi embayment (Sabine River to the Alabama River)*. Bull. Amer. Paleont., vol. 30, No. 117, 564 pp., 65 pls. Part I. *Bivalves and bibliography for parts I and II*. G. D. Harris, 1946, 206 pp., 25 pls. Part II. *Univalves and index*. K. V. Palmer, 1947, pp. 207-563, pl. 26-56, 62-64; pls. 57-61 by G. D. Harris.

Harris, Gilbert Dennison, and Veatch, Arthur Clifford

1899. *The geology of Louisiana. A preliminary report*. Part V. Baton Rouge, La., pp. 354, 62 pls.

Harris, Gilbert Dennison, Veatch, Arthur Clifford, and Pacheco, Jov. A. A.

1902. *A report of the geology of Louisiana*. Part VI. Baton Rouge, La., pp. 288, 44 pls.

Hayden, Ferdinand Vandiveer

1858. See under Meek, F. B., and Hayden, F. V.
1862. See under Meek, F. B., and Hayden, F. V.

Heilprin, Angelo

- 1879a. *On some new Eocene fossils from the Claiborne marine formation of Alabama*. Acad. Nat. Sci. Philadelphia, Proc. 1879, vol. 31, pp. 211-216, pl. 13
- 1879b. *A comparison of the Eocene Mollusca of the southeastern United States and western Europe in relation to the determination of identical forms*. Acad. Nat. Sci. Philadelphia, Proc. 1879, vol. 31, pp. 217-225
1880. *On some new species of Eocene Mollusca from the southern United States*. U.S. Nat. Mus., Proc., vol. 3, pp. 149-152, 1 pl.
1881. *On some new lower Eocene Mollusca from Clarke Co., Ala., with some points as to the stratigraphical positions of the beds containing them*. Acad. Nat. Sci. Philadelphia, Proc. 1880, vol. 32, pp. 364-375, pl. 20
- 1881a. *Notes on the Tertiary geology of the southern United States*. Acad. Nat. Sci. Philadelphia, Proc. 1881, vol. 33, pp. 151-159
- 1882a. *A revision of the Cis-Mississippi pectens of the United States*. Acad. Nat. Sci. Philadelphia, Proc. 1881, vol. 33, pp. 416-422
- 1882b. *A revision of the Tertiary species of Arca of the eastern and southern United States*. Acad. Nat. Sci. Philadelphia, Proc. 1881, vol. 33, pp. 448-453
- 1882c. *On some new species of Eocene Mollusca from the southern United States*. Smithsonian Misc. Coll., vol. 22, pp. 149-152, 1 pl. (reprint of vol. 3, U.S. Nat. Mus., Proc., see Heilprin, 1880)

- 1884a. *The Tertiary geology of the eastern and southern United States.* Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 9, pp. 115-154, pl. 4
1884b. *Contributions to the Tertiary geology and paleontology of the United States.* Philadelphia, 117 pp., map
1884c. *North American Tertiary Ostreidae.* App. I. Pp. 309-316, pls. 62-72, in White, Charles A., *A review of the fossil Ostreidae of North America; and a comparison of the fossil with the living forms.* U.S. Geol. Sur., 4th Ann. Report. 1882-1883, pp. 273-473, pls. 34-82
1886. *Notes on the Tertiary geology and paleontology of the southern United States.* Acad. Nat. Sci. Philadelphia, Proc. 1886, vol. 38, pp. 57-58
1887. *Explorations of the west coast of Florida . . .* Wagner Free Inst. Sci. Philadelphia, Trans., vol. 1, 134 pp., pls. 1-16b, 19 (Reprint Paleontological Research Institution, 1964)
1891a. *The Eocene Mollusca of the state of Texas.* Acad. Nat. Sci. Philadelphia, Proc. 1890, vol. 42, pp. 393-406
1891b. *The geology and paleontology of the Cretaceous deposits of Mexico.* Acad. Nat. Sci. Philadelphia, Proc. 1890, vol. 42, pp. 445-469, pls. 51-54

Henderson, Junius

1935. *Fossil non-marine Mollusca of North America.* Geol. Soc. America, Spec. Paper 3, 313 pp.

Herrick, Stephen Marion

1960. *Some small Foraminifera from Shell Bluff, Georgia.* Bull. Amer. Paleont., vol. 41, No. 187, pp. 113-130, pls. 14-16
1963. See under Browne R. G., and Herrick, S. M.

Hilgard, Eugene Weldemar

1860. *Report on the geology and agriculture of the state of Mississippi.* Jackson, pp. 391, map
1869. *Supplementary and final report of a geological reconnoissance of the state of Louisiana . . .* New Orleans, pp. 44
1871. In Hopkins, F. V., 1871, which see
1885. *The old Tertiary of the southwest.* Amer. Jour. Sci., vol. 130, 3d ser., vol. 30, No. 178, Art. 33, pp. 266-269

Hinds, Richard Brinsley

1843. *Descriptions of new species of Nucula, from the collections of Sir Edward Belcher, C. B. and Hugh Cuming Esq.* Zool. Soc. London, Proc. 1843, pt. XI, pp. 97-100
1844. *Descriptions of Marginellae collected during the voyage of H. M. S. Sulphur, and from the collection of Mr. Cuming.* Zool. Soc. London, Proc. 1844, pt. XII, pp. 72-77

Hodge, James Thacher

1841. *Observations on the secondary and Tertiary formations of the southern states.* App. by T. A. Conrad, pp. 344-348, pl. 2. Amer. Jour. Sci., vol. 41, pp. 332-348. (reprinted in 1843, Assoc. Amer. Geol. and Nat., Trans., pp. 94-111)

Hodson, Floyd, Hodson, Helen King, and Harris, Gilbert Dennison

1927. *Some Venezuelan and Caribbean mollusks.* Bull. Amer. Paleont., vol. 13, No. 49, 160 pp., 40 pls.

Hodson, Helen King

1927. See under Hodson, F., Hodson, H. K., and Harris, G. D.

Hoeninghaus, Friedrich Wilhelm

1831. *Versuch einer geognostischen Eintheilung seiner Versteinerung-Sammlung. Pt. 8.* [Neues] Jahrbuch für Mineralogie, 2d Jahrgang, pp. 132-170

Hoernes, Moriz

1870. *Die Fossilen Mollusken des Tertiaer-Beckens von Wien. I. Univalven.* Pp. 736, 52 pls. *II. Bivalven.* Pp. 479, 85 pls. Kaiserlich-Königlichen Geologischen Reichsanstalt Abhandlungen Bds. III, IV

Holmes, Francis Simmons

1857. See Tuomey, M., and Holmes, F. S.

Hopkins, Frederick Vincent

1871. Second annual report of the Geological Survey of Louisiana . . . Pp. 1-34, map. *In* Louisiana State University Ann. Rept. for 1870

Hopkins, Oliver Baker

1917. *Oil and gas possibilities of the Hatchetigbee anticline Alabama.* U.S. Geol. Sur., Bull. 661-H, pp. 279-313, pls. 26-29

Hopkinson, John

1907. *Dates of publication of the separate parts of Gmelin's edition (13th) of the "Systema Naturae" of Linnaeus.* Zool. Soc. London, Proc. 1907, pt. II, pp. 1035-1037

Hovey, Edmund Otis

1901. See under Whitfield, R. P., and Hovey, E. O.

Howe, Henry Van Wagenen

1925. *"The Many Salt Dome," Sabine Parish, Louisiana.* Amer. Assoc. Petrol. Geol., vol. 9, No. 1, pp. 170-171
1937. *Large oyster from the Gulf Coast Tertiary.* Jour. Paleont., vol. 11, No. 4, pp. 355-366, pl. 44

Hughes, Richard John, Jr.

1961. *Nemocardium nicolletti from the Paleocene Matthews Landing marl in Mississippi.* Jour. Paleont., vol. 35, No. 2, pp. 385-390, pl. 54, text fig.

Hutton, Frederick Wollaston

1885. *Description of new Tertiary shells.* New Zealand Inst., Trans., vol. 17, pp. 313-332, pl. 18

Hyatt, Alpheus

1883. *Genera of fossil cephalopods.* Boston Soc. Nat. Hist., Proc., vol. 22, pp. 253-338

Ingram, William Marcus

1942. *Type fossil Cypræidae of North America.* Bull. Amer. Paleont., vol. 27, No. 104, 32 pp., 4 pls.

Johnson, Bertrand Leroy

1912. See Clark, W. B., Stephenson, B. L., Johnson, B. L., and Parker, H. N.

Johnson, Charles Willison

1892. See under Pilsbry, H. A., and Johnson, C. W .
1899. *New and interesting species in the "Isaac Lea Collection of Eocene Mollusca."* Acad. Nat. Sci. Philadelphia, Proc. 1899, vol. 51, pp. 71-82, pls. 1-2
1904. *Description of two new Tertiary fossils.* Nautilus, vol. 17, No. 12, pp. 143-144, 2 figs.
1905. *Annotated list of the types of invertebrate Cretaceous fossils in the collection of the Academy of Natural Sciences, Philadelphia.* Acad. Nat. Sci. Philadelphia, Proc. 1905, vol. 57, pp. 4-28
1931. *New fossil species of the genus Epitonium from South Carolina.* Nautilus, vol. 45, No. 1, pp. 6-10 pl. 1

Johnson, Charles Willison, and Grabau, Amadeus William

1901. *A new species of Clavilithes from the Eocene of Texas.* Acad. Nat. Sci. Philadelphia, Proc. 1901, vol. 53, pp. 602-603

Johnson, Laurence Clement

1889. *The "Grand-Gulf" formation of the Gulf States.* Amer. Jour. Sci., 3d ser., vol. 38, pp. 213-216, fig.
1894. See Smith, E. A., Johnson, L. C., and Langdon, D. W. Jr.

Jones, Thomas Rupert

1878. See Dixon, Frederick

Keen, Angeline Myra

1937. *Nomenclatural units of the pelecypod family Cardiidae.* Musée roy. d'Histoire Nat. Belgique, Bull., t. 13, No. 7, 22 pp.
1944. *Catalogue and revision of the gastropod subfamily Typhinae.* Jour. Paleont., vol. 18, No. 1, pp. 50-72, 20 text figs.
1950. *Notes on the history of Nemocardium (family Cardiidae).* Jour. Conchylol., vol. 90, 4th ser., t. 43, pp. 23-29
1951. *Outline of a proposed classification of the pelecypod family Cardiidae.* Min. Conch. Club Southern California, No. 111, pp. 6-8
1954. *Five new species and a new subgenus in the pelecypod family Cardiidae.* Bull. Amer. Paleont., vol. 35, No. 153, 24 pp., 1 pl.
1960. In *Treatise on Invertebrate Paleontology*. Pt. I, Mollusca, 1351 pp., 216 figs.
1961. *A proposed reclassification of the gastropod family Vermetidae.* British Mus. (Nat. Hist.), Bull., vol. 7, No. 3, 214 pp., 1 pl.

Kellum, Lewis Burnett

1926. *Paleontology and stratigraphy of the Castle Hayne and Trent marls in North Carolina.* U.S. Geol. Sur., Prof. Paper 143, 56 pp., 11 pls.

Kennedy, William

1892. *A section from Terrell, Kaufman County to Sabine Pass on the Gulf of Mexico.* Pp. 41-125 in Dumble, E. T., Third annual report of the geological survey of Texas. Austin, pp. 410
1895. *The Eocene Tertiary of Texas east of the Brazos River.* Acad. Nat. Sci. Philadelphia, Proc. 1895, vol. 47, pp. 89-160

Kent, Lois Schoonover

1960. See Brann, D. C., and Kent, L. S.

1960. *A new subspecies of Crassatella clarkensis (Dall) from the Claiborne Eocene of southern United States*. App. I, pp. 986-988, pl. 1 in Brann, D.C., and Kent, L.S., which see

Kerr, Washington Carruthers

1875. *Report of the geological survey of North Carolina*. Vol. I *Physical geography, resumé economical geology*. Pp. xviii + 325, App., 120 pp., 8 pls., ill., map

Koenen, Adolf von

1885. *Ueber eine Paleocäne Fauna von Kopenhagen*. Koenigliche Gesellschaft der Wissenschaften zu Gottingen, Bd. 32, 128 pp., 5 pls.

Krause, Erwin Koerps

1957. See under Stenzel, H. B., Krause, E. K., and Twining, J. T.

Kummel, Bernhard

1956. *Post-Triassic nautiloid genera*. Mus. Comp. Zool. Harvard, Bull., vol. 114, No. 7, pp. 324-494, 28 pls., 35 figs.

Lamarck, Jean Baptiste Pierre Antoine de Monet de

1801. *Système des animaux sans vertèbres ou tableau général des classes, des orders et des genres de ces animaux*. Paris, pp. 432
 1802-1809. *Memoires sur les fossiles des environs de Paris, comprenant la détermination des espèces qui appartiennent aux animaux marine sans vertèbres, et dont la plupart sont figurés dans la collection des vélins du Muséum*. Ann. Mus. nat. Hist. nat.
 1802. T. 1, pp. 299-312; 383-391; 474-478
 1803. T. 2, pp. 57-64; 163-169; 217-227; 315-321; 385-391
 1804a. T. 3, pp. 163-170; 266-274; 343-352; 436-441
 1804b. T. 4, pp. 46-55; 105-115; 212-222; 289-298; 429-436
 1804c. T. 5, pp. 28-36; 91-98; 179-188; 237-245; 349-357
 1805. T. 6, pp. 117-126; 214-228; pls. I-IV; 337-345; 407-415
 1806a. T. 7, pp. 53-62; 130-139; 231-244; pls. V-VII; 419-430
 1806b. T. 8, pp. 77-79; 156-166; 347-355; 383-388; 461-469; pls. VIII
 XIV
 1807. T. 9, pp. 236-240; 399-401; pls. XV-XX
 1808. T. 12, pp. 456-459, pls. XXI-XXIV
 1809. T. 14, pp. 374-375, pls. XXV-XXVIII
 1818-1822. *Histoire naturelle des animaux sans vertèbres* . . . Paris, 7 vols.
 1818. T. 5, 612 pp.
 1819. T. 6, 232 pp.
 1822. T. 7, 711 pp.

La Moreaux, Philip E., and Toulmin, Lyman

1959. *Geology and ground-water resources of Wilcox County, Alabama*. Geol. Sur. Alabama County Rept. 4, 280 pp., 60 figs., maps

Lamouroux, Jean Vincent Felix, Bory de St. Vincent, and Deslongchamps, Eugène Eudes

1824. *Histoire naturelle des zoophytes ou animaux Rayonnées*. Encyclopédie Méthodique . . . Paris, pp. viii + 819

Lamy, Edouard

1941. *Revision des Corbulidae vivants du Muséum National d'Histoire Naturelle de Paris*. Jour. Conchyliol., vol. 84, pp. 5-33, 121-144, 211-254

Langdon, Daniel W., Jr.

1886. *Observations on the Tertiary of Mississippi and Alabama with descriptions of new species*. Amer. Jour. Sci., vol. 131, 3d ser., vol. 31, No. 183, Art. 20, pp. 202-209
1894. See Smith, E. A., Johnson, L. C., and Langdon, D. W., Jr.
1891. *Variations in the Cretaceous and Tertiary strata of Alabama*. Geol. Soc. America, Bull., vol. 2, pp. 587-606, pl. 23
1894. Section II. *The Tertiary and Cretaceous formations east of the Alabama River*. Pp. 368-445 in Smith, Eugene Allen, Johnson, Lawrence Clement, and Langdon, Daniel W., Jr., *Report on the geology of the Coastal Plain of Alabama*. Alabama Geol. Sur., Montgomery, Ala., 759 pp., 29 pls.

Lea, Henry Carey

1841. *Descriptions of some new species of fossil shells from the Eocene at Claiborne, Alabama*. Amer. Jour. Sci., 1st ser., vol. 40, pp. 92-103, pl. 1
1846. *Description of some new fossil shells, from the Tertiary of Petersburg, Virginia*. Amer. Phil. Soc., vol. 9, pp. 229-274, pls. 34-37
1849. *Catalogue of the Tertiary Testacea of the United States*. Acad. Nat. Sci. Philadelphia, Proc. 1848, vol. 4, pp. 95-107

Lea, Isaac

1833. *Contributions to geology*. Philadelphia, pp. 227, 6 pls. [December]
1861. *Descriptions of new fossil Mollusca from the Cretaceous formation at Haddonfield, New Jersey*. Acad. Nat. Sci. Philadelphia, Proc. 1861, vol. 13, pp. 148-160

Le Blanc, Rufus Joseph

- 1942+. *Systematic descriptions of Lower Eocene Scaphopoda and Gastropoda of Louisiana*. Pp. 79-156, pls. 12-19 in Barry, John O'Keefe, and LeBlanc, Rufus Joseph, *Lower Eocene faunal units of Louisiana*. Louisiana Dept. of Conservation, Geol. Bull., No. 23, 208 pp., 19 pls., 5 text figs., 2 tables

Lerch, Otto

1892. *A preliminary report upon the hills of Louisiana*. Part I. Geology and Agriculture State Experiment Station, Baton Rouge, La. Pp. 148, maps

Lesson, René Primevère

1831. *Illustrations de zoologie ou recueil de figures d'animaux peintes d'après nature*. Paris, pp. 102 by plates

Lesueur, Charles Alexander

1829. *Walnut Hills fossil shells*. Five pls. [Never published]. See Gardner, *Lesueur's Walnut Hills fossil shells*. Jour. Paleont., vol. 12, No. 3, 1938, pp. 300-301

Libassi, Ignazio

1859. *Memoria sopra alcune Conchiglie fossili dei dintorni di Palermo . . .* Reale Accad. Sci. . . . Atti . . . , n. s., vol. 3, 47 pp., 1 pl.

Linnaeus, Carlos [Linné]

1758. *Systema Naturae. Regnum Animale*. Holmiae, 10 ed., 824 pp.

1767. *Systema Naturae. Editio duodecima reformata*. "*Vermes Testacea*," t. 1, pt. 2, pp. 533-1327 [26]. Pp. 1106-1269, reprinted in "*Ipsa Linnaei Conchylia*," see Hanley, S. C. T., 1855

Loeblich, Alfred Richard, and Tappan, Helen

1957. *Planktonic Foraminifera of Paleocene and early Eocene age from the Gulf and Atlantic Coastal Plains*. Pp. 173-198, text figs. 27-28, pls. 40-64 in Loeblich, et al., *Studies in Foraminifera*. U.S. Nat. Mus., Bull. 215, 323 pp., 30 text figs., 74 pls.

Lonsdale, John Tipton, and Day, James R.

1937. *Geology and ground-water resources of Webb County, Texas*. U.S. Geol. Sur., Water-Supply Paper 778, 104 pp., 6 text figs., 13 pls.

Lowe, Ephraim Noble

1933. *The Eocene formations below Jackson*. Mississippi Geol. Sur., Bull. 25, 125 pp., 20 figs.

Lyell, Charles

1845. *Observations on the white limestone and other Eocene or older Tertiary formations of Virginia, South Carolina, and Georgia*. Quart. Jour. Geol. Soc. London, Proc., vol. 1, pp. 429-442, text figs.

MacNeil, Francis Stearns

1934. *The pelecypod genus Vulsella in the Ocala limestone of Florida and its bearing on correlation*. Washington Acad. Sci., Jour., vol. 24, No. 10, pp. 428-431, 11 figs.

1937. *The systematic position of the pelecypod genus Trinacria*. Washington Acad. Sci., Jour., vol. 27, No. 11, pp. 452-458, 1 text fig.

1951. *Nucula austinclarki, n. sp. a concentrically sculptured Nucula from the Lisbon formation of Alabama*. Washington Acad. Sci., Jour., vol. 41, No. 1, pp. 12-14, figs. 1-2

1952. See under Cooke, C. W., and MacNeil, F. S.

1954. *Stenzelia, new name for Trinacriella MacNeil*. Jour. Paleont., vol. 28, No. 2, p. 217

Mansfield, Wendell Clay

1937. *Mollusks of the Tampa and Suwannee limestones of Florida*. Florida Geol. Sur., Bull. No. 15, 334 pp., 21 pls.

Martin, George Curtis

1901. See Clark, W. B., and Martin, G. C.

1904. *Systematic paleontology. Miocene Mollusca*. [except Pelecypoda] Maryland Geol. Sur., pp. 130-274, pls. 39-64

Martini, Friedrich Heinrich Wilhelm

1769-1777. *Neues systematisches Conchylien-Cabinet*. Nürnberg, vols. 1-11.

1769, vol. 1, pp. 1-31; 1773, vol. 2, pls. 32-45; 1777, vol. 3, pls. 46-121. Continued by Chemnitz and others. For dates see Newton, 1891, p. 316

Maury, Carlotta Joaquina

1909. *A new connecting link in the genesis of Fulgur*. Amer. Jour. Sci., 4th ser., vol. 27, No. 160, p. 335, text fig.
1910. *New Oligocene shells from Florida*. Bull. Amer. Paleont., vol. 4, No. 21, 46 pp., 9 pls.
1912. *A contribution to the paleontology of Trinidad*. Acad. Nat. Sci. Philadelphia, Jour., 2d ser., vol. 15, pp. 23-112, pls. 5-13
1917. *Santo Domingo type sections and fossils*. Bull. Amer. Paleont., vol. 5, No. 29, pt. 1, 251 pp., 39 pls.

McCallie, Samuel Washington

1908. *A preliminary report on the underground waters of Georgia*. Georgia Geol. Sur., Bull. 15, 370 pp., map

McLean, James Douglas, Jr.

1956. *The Foraminifera of the Yorktown formation in the York-James Peninsula of Virginia with notes on the associated mollusks*. Bull. Amer. Paleont., vol. 36, No. 160, pp. 255-393, pls. 35-53

McLean, Richard Alfred

1951. *The Pelecypoda or bivalve mollusks of Porto Rico and the Virgin Islands*. New York Acad. Sci., vol. 17, pt. 1, 183 pp., 26 pls.

Meek, Fielding Bradford

1864. *Check list of the invertebrate fossils of North America, Cretaceous and Jurassic*. Smithsonian Misc. Coll., No. 177, 40 pp.
1876. *A report on the invertebrate Cretaceous and Tertiary fossils of the upper Missouri country*. U.S. Geol. Sur. of the Territories. Pp. lxiv + 629, 45 pls.

Meek, Fielding Bradford, and Hayden, Ferdinand Vandiveer

1858. *Descriptions of new organic remains collected in Nebraska . . . together with some remarks on the geology of the Black Hills and portions of the surrounding country*. Acad. Nat. Sci. Philadelphia, Proc. 1858, vol. 10, pp. 41-59, map
1862. *Descriptions of new Lower Silurian (Primordial), Jurassic, Cretaceous, and Tertiary fossils, collected in Nebraska . . .* Acad. Nat. Sci. Philadelphia, Proc. 1861, vol. 13, pp. 415-447

Melleville, Maximilien

1843. *Mémoire sur les sables tertiaires inférieurs du bassin de Paris, avec la description de 78 espèces de Coquilles fossiles inédites de ce terrain et 10 planches représentant ces espèces*. Ann. Sci. Géol., by M. A. Rivière, année 2, No. 2, pp. 1-30, 77-120, pls. 1-10

Menke, Karl Theodor (Carolo Theodoro), and Pfeiffer, Louis

1852. [Review of Conrad, Acad. Nat. Sci. Philadelphia, Jour., vol. 1, 2d ser., 1847-50]. Zeitschrift für Malakozoologie 1852. Neunter Jahrgang, Nr. 3, pp. 43-48

Meyer, Otto

1884. *Notes on Tertiary shells*. Acad. Nat. Sci. Philadelphia, Proc. 1884, vol. 36, pp. 104-112, 3 text figs.

- 1885a. *The genealogy and the age of the species of the southern Old-Tertiary*. Part I. Amer. Jour. Sci., vol. 129, 3d ser., vol. 29, No. 174, pp. 457-468
- 1885b. *Ibid.* Part II. Amer. Jour. Sci., vol. 130, 3d ser., vol. 30, No. 175, pp. 60-72
- 1885c. *Ibid.* Part III. *Reply to Criticisms*. Amer. Jour. Sci., vol. 130, 3d ser., vol. 30, No. 180, pp. 421-435
- 1886a. *Observations on the Tertiary and Grand Gulf of Mississippi*. Amer. Jour. Sci., vol. 132, 3d ser., vol. 32, No. 187, pp. 20-25
- 1886b. Part II. *Contributions to the Eocene paleontology of Alabama and Mississippi*. Pp. 61-85, pls. 1-3 in Smith, Eugene Allen, Geol. Sur. Alabama, Bull. No. 1, 85 pp., 9 pls.
- 1887a. *Beitrag zur Kenntniss der Fauna des Alttertiärs von Mississippi und Alabama*. Senckenbergische naturforschende Gesellschaft in Frankfurt a. M. 1887 (org. 1886), 22 pp., 2 pls.
- 1887b. *On invertebrates from the Eocene of Mississippi and Alabama*. Acad. Nat. Sci. Philadelphia, Proc. 1887, vol. 39, pp. 51-56, pl. 3

Meyer, Otto, and Aldrich, Truman Hemingway

1886. *The Tertiary fauna of Newton and Wautubbee, Mississippi*. Cincinnati Soc. Nat. Hist., Jour., vol. 9, No. 2, pp. 40-50, 64, pl. 2

Miller, Arthur K.

1947. *Tertiary nautiloids of the Americas*. Geol. Soc. America, Mem. 23, 234 pp., 100 pls.

Miller, Arthur K., and Downs, Harold Robert

1950. *Tertiary nautiloids of the Americas: Supplement*. Jour. Paleont., vol. 24, No. 1, pp. 1-18, pls. 1-10

Miller, Arthur K., and Furnish, William Madison, Jr.

1938. *Aturia from the Tertiary of Mexico*. Jour. Paleont., vol. 12, No. 2, pp. 149-155, pl. 25, text fig.

Miller, Arthur K., and Thompson, Marcus Luther

1933. *The nautiloid cephalopods of the Midway group*. Jour. Paleont., vol. 7, No. 3, pp. 298-324, pls. 34-38
1935. *The nautiloid genus Aturoidea in America*. Jour. Paleont., vol. 9, No. 7, pp. 563-571, pls. 65-66, fig. 2

Miller, Benjamin Le Roy

1912. See Clark, W. B., and Miller, B. Le R.

Miller, Benjamin Le Roy, and Stephenson, Lloyd William

1912. *The Coastal Plain of North Carolina*. Bibliography, Pt. I, pp. 44-73, in Clark, W. B., et al., North Carolina Geol. Ec. Sur., vol. 3, 552 pp.

Miller, Samuel Almond

1881. *North American Mesozoic and Caenozoic geology and palaeontology. The Caenozoic age or Tertiary period*. Cincinnati Soc. Nat. Hist., Jour., vol. 4, No. 1, pp. 3-46

Moersch, Otto Andreas Lowson

1860. *Review of the genus Tenagodus Guettard*. Zool. Soc. London, Proc. 1860, pt. 26, pp. 409-415

Monterosato, Tommaso Allery di

1878. *Enumerazione e sinonimia delle Conchiglie Mediterranee . . . Parte prima*. Giornale Societa de Scienze Naturali ed Economiche Palermo, vol. 13, pp. 61-115

Moore, Ellen James

1962. *Conrad's Cenozoic fossil marine mollusk type specimens at the Academy of Natural Sciences of Philadelphia*. Acad. Nat. Sci. Philadelphia, Proc. 1962, vol. 114, No. 2, pp. 23-120

Moore, Wayne Elden

1955. *Geology of Jackson County, Florida*. Florida Geol. Sur., Bull. No. 37, 101 pp., 25 figs., map

Morton, Samuel George

1827. *Description of a new species of Ostrea; with some remarks on the O. convexa Say*. Acad. Nat. Sci. Philadelphia, Jour., 1st ser., vol. 6, pp. 50-51, pl. 4, figs. 1-2, pl. 5, figs. 1-3
- 1828a. *Geological observations on the Secondary, Tertiary, and Alluvial formations of the Atlantic coast of the United States of America. Arranged from the notes of Lardner Vanuxem*. Acad. Nat. Sci. Philadelphia, Jour., 1st ser., vol. 6, pp. 59-71
- 1828b. *Description of the fossil shells which characterize the Atlantic Secondary formations of New Jersey and Delaware; including four new species*. Acad. Nat. Sci. Philadelphia, Jour., 1st ser., vol. 6, pp. 72-100, pls. 3-6
- 1828c. *Additional observations on the geology and organic remains of New Jersey and Delaware*. Acad. Nat. Sci. Philadelphia, Jour., vol. 6, pp. 189-204, pl. 8
- 1830a. *Synopsis of the organic remains of the ferruginous sand formation of the United States; with geological remarks*. Amer. Jour. Sci., 1st ser., vol. 17, pp. 274-295
- 1830b. *Ibid.* (cont'd.). Amer. Jour. Sci., 1st ser., vol. 18, pp. 243-250
- 1830c. *Additional observations on the geology and organic remains of New Jersey and Delaware*. Acad. Nat. Sci. Philadelphia, Jour., 1st ser., vol. 6, pp. 189-204, pl. 8
- 1833a. *Supplement to the "Synopsis of the Organic Remains of ferruginous sand formation of the United States" contained in vols. 17 and 18 of this Journal*. Amer. Jour. Sci., 1st ser., vol. 23, No. 2, pp. 288-294, pls. 5, 8
- 1833b. *Ibid.* (cont'd.). Amer. Jour. Sci., 1st ser., vol. 24, pp. 128-132, pls. 9, 10
1834. *Synopsis of the organic remains of the Cretaceous group of the United States*. Appendix. Catalogue of the fossil shells of the Tertiary formation of the United States, by Timothy A. Conrad. Philadelphia, 88 pp., 19 pls., App. pp. 1-8
1842. [Description of two new species of fossils from the lower Cretaceous strata of New Jersey.] Acad. Nat. Sci. Philadelphia, Proc., vol. 1, p. 132 [only]
- 1842a. *Description of some new species of organic remains of the Cretaceous group of the United States; with a tabular view of the fossils hitherto discovered in this formation*. Acad. Nat. Sci. Philadelphia, Jour., 1st ser., vol. 8, pt. 2, pp. 207-227, pls. 10-11

Morton, Samuel George, and Vanuxem, Lardner

1828. See under Morton, S. G., 1828a

Mossom, Stuart

1929. See under Cooke, C. W., and Mossom, Stuart

Muenster, Georg. Grafen von

1834. *Über das Kalkmergel-Lager von St. Cassian in Tyrol und die darin vorkommenden Ceratiten*. Neues Jahrb. für Min. Geol. Pal., Bd. 2, pp. 1-15, pls. 1-2

1841. See under Wissmann, H. L., and Muenster, G.

Murray, Grover Elmer

1961. *Geology of the Atlantic and Gulf Coastal Province of North America*. Harper & Brothers, New York. Pp. XI + 692, figs.

Naef, Adolf

1922. *Die Fossilen Tintenfische*, Gustav Fischer, Jena 1922, 382 pp., 101 figs.

Newton, Richard Bullen

1891. *Systematic list of the Frederick E. Edwards Collection of British Oligocene and Eocene Mollusca in the British Museum (Natural History)* . . . London, pp. 365

1902. *List of Thomas Say's types of Maryland (U.S.) Tertiary Mollusca in the British Museum*. Geol. Mag., n.s., decade 4, vol. 9, No. 7, pp. 303-305

Newton, Richard Bullen, and Harris, George Frederick

1894. *A revision of the British Eocene Scaphopoda with descriptions of some new species*. Malacol. Soc. London, Proc., vol. 1, pp. 63-69, pl. 6

Nicol, David

1945. *Genera and subgenera of the pelecypod family Glycymeridae*. Jour. Paleont., vol. 19, No. 6, pp. 616-621

1953. *Systematic position of the pelecypod Euloxa*. Jour. Paleont., vol. 27, No. 1, pp. 56-61, 8 figs.

1954. *Nomenclatural review of genera and subgenera of Cucullaeidae*. Jour. Paleont., vol. 28, No. 1, pp. 96-101

Nyst, Pierre Henri

1836. *Recherches sur les Coquilles Fossiles de Houssel et de Kleyn-Spauwen (Province du Limbourg)*. Messenger Sci. Arts Belgique (Gand), iii + 40 pp., 4 pls.

1845. *Description des Coquilles et des Polypiers fossiles des Terrains Tertiaires de la Belgique*. Acad. roy. Belgique Sci. Letters et Beau-Arts, Memoire couronnés, t. 17, 697 pp., 15 pls.

1848. *Tableau synoptique et synonymique des espèces vivantes et fossiles de la famille des Arcacées avec l'indication des dépôts dans lesquels elles ont été recueillies* . . . 1st pt. genre Arca. Acad. roy des Sciences, . . . , t. 22, 79 pp.

Olsson, Axel Adolf

1928. *Contributions to the Tertiary paleontology of northern Peru: Part I. Eocene Mollusca and Brachiopoda*. Bull. Amer. Paleont., vol. 14, No. 52, 150 pp., 24 pls.
1929. *Contributions to the Tertiary paleontology of northern Peru. Part II. Upper Eocene Mollusca and Brachiopoda*. Bull. Amer. Paleont., vol. 15, No. 57, 50 pp., 8 pls.
1944. *Contributions to the paleontology of northern Peru. Part VII. The Cretaceous of the Paita Region*. Bull. Amer. Paleont., vol. 28, No. 111, 146 pp., 17 pls.
1964. *Neogene mollusks from northwestern Ecuador*. Ithaca, N.Y. Paleontological Research Institution, 256 pp., 38 pls. ,

Olsson, Axel Adolf, and Harbison, Anne

1953. *Pliocene Mollusca of southern Florida*. Acad. Nat. Sci. Philadelphia, Mon. No. 8, v + 457 pp., 65 pls.

d'Orbigny, Alcide Dessalines d'

- 1835a-1845a. *Voyage dans l'Amérique Méridionale*. T. 5^e pt. 3, *Mollusques*, xliii + 758 pp.
- 1840b-1894b. *Paléontologie Française. Description zoologique et géologique de tous les animaux mollusques et rayonnés fossiles de France . . .* Twenty four vols.
- 1842b-1843b. *Terrains Crétacés*. T. 2. *Gastropods*, 456 pp., pls. 49-236
- 1844b-1847b. *Ibid*. T. 3. *Lamellibranchs*, 807 pp., 237-489, 242 bis, 247 bis, 186 bis pls.
- 1841c-1853c? *Histoire physique, politique et naturelle de l'île de Cuba (Sagra)*. Twelve vols. and atlases. Part II. [Natural History] *Mollusques*. Two vols.
- 1841c. Vol. 1, pp. 1-208
- 1842c. Vol. 1, pp. 209-264
- 1843c. Vol. 2, pp. 1-112
- 1853c? Vol. 2, pp. 113-380
1850. *Prodrome de paléontologie stratigraphique universelle des animaux mollusques & rayonnés faisant suite au cours élémentaire de paléontologie et de géologie stratigraphiques*. Paris, vol. 2, 427 pp.
1852. *Ibid*. Index, vol. 3, 189 pp.

Owen, David Pace

1860. *Second report of a geological reconnoissance of the middle and southern counties of Arkansas made during the years 1859 and 1860*. Philadelphia, 433 pp., 9 pls.

Pace, Stephen

1902. *Contributions to the study of the Columbelloidae*. Malacol. Soc. London, Proc. 1902-1903, vol. 5, pp. 36-154

Pacheco, Jov. A. A.

1902. See Harris, G. D., Veatch, A. C., and Pacheco, Jov. A. A.

Page, Richard Adams

1959. *The questionable age of the Aquia formation*. Jour. Pal., vol. 33, No. 2, pp. 347-350

Palmer, Katherine E. Hilton Van Winkle

1919. See under Van Winkle, Katherine E. H., and Harris, G. D.
 1921. See under Van Winkle, Katherine E. H.
 1927/1929. *The Veneridae of eastern America, Cenozoic and Recent*. Palaeont. Amer., vol. 1, No. 5, 319 pp., text figs. 35 (1927); 45 pls. (1929)
 1928. See under Price, W. A., and Palmer, K. V. W.
 1935. *Marquis de Gregorio Claiborne types*. Nautilus, vol. 50, No. 3, p. 100
 1937. *The Claibornian Scaphopoda, Gastropoda, and dibranchiate Cephalopoda of the southern United States*. Bull. Amer. Paleont., vol. 7, No. 32, pt. 1, 548 pp., pt. 2, 90 pls.
 1938. *Nomenclatorial notes on Eocene Mollusca*. Bull. Amer. Paleont., vol. 24, No. 80, 7 pp.
 1939. *Basilosaurus in Arkansas*. Amer. Assoc. Pet. Geol., Bull., vol. 23, No. 8, pp. 1228-1229
 1940. *Anevda, new name for Advena, Palmer, 1937 not Gude, 1913*. Jour. Paleont., vol. 14, No. 3, p. 285
 1942. *Substitutes for molluscan homonyms*. Jour. Paleont., vol. 16, No. 5, p. 674
 1944. *Notes on Eocene gastropods, chiefly Claibornian*. Bull. Amer. Paleont., vol. 28, No. 112, 26 pp., 2 pls.
 1945. *Marquis de Gregorio Claiborne types*. Nautilus, vol. 59, No. 1, pp. 34-35
 1947. *Univalves and index*. Pp. 207-563, pls. 26-56, 62-64 in Harris, G. D. and Palmer, K. V. W., *The Mollusca of the Mississippi embayment (Sabine River to the Alabama River)*. Bull. Amer. Paleont., vol. 30, No. 117, 564 pp., 65 pls.
 1953. See Richards, H. G., and Palmer, K. V. W.
 1955. *New name for Hipponix floridanus Palmer*. Jour. Paleont., vol. 29, No. 3, p. 558
 1957. *A new Gisortia from the Crystal River formation, Ocala group, of Florida, with explanatory notes on the Tethyan influence in the Floridian middle and upper Eocene*. Palaeont. Soc. India, Jour., pp. 69-72, pl. 9

Palmer, K. V. W., and Richards, H. G.

1954. *Old world affinities of some Eocene mollusks from Florida*. Union Pal. Inter. Congress Geol. Inter., Comptes Rend. 19th sess. 1952, fasc. 19, pp. 35-38

Parker, Horatio Newton

1912. See Clark, W. B., Stephenson, L. W., Johnson, B. L., and Parker, H. N.

Patterson, Joseph M.

1942. *Stratigraphy of Eocene between Laredo and Rio Grande City, Texas*. Amer. Assoc. Petrol. Geol., Bull., vol. 26, No. 2, pp. 256-274

Pease, William Harper

1860. *Descriptions of forty-seven new species of shells from the Sandwich Islands, in the collection of Hugh Cuming*. Zool. Soc. London, Proc., pt. 26, pp. 431-438

Perrilliat Montoya, Maria del Carmen

1963. *Mollusca del Terciario inferior del noreste de Mexico*. Paleontologia Mexicana, No. 19, 26 pp., 15 pls.

Pfeiffer, Louis

1852. See under Menke, Karl, and Pfeiffer, Louis

Philippi, Rudolpho Amando

1836. *Enumeratio molluscorum Siciliae* . . . Vol. I, Berlin, xiv + 268 pp., pls. 1-12
1844. *Ibid.* Vol. II, Halle, iv + 303 pp., pls. 13-18
1846. *Verzeichniss der in der Gegend von Magdeburg aufgefundenen Tertiäerversteinerungen*. Palaeontographica, 1 Bd., pp. 42-90, pls. 7-10a
1860. *Reise durch die Wüste Atacama auf befehl der chilenischen Regierung in Somner 1835-1854*. Halle, 192 pp. + 62, 27 pls., 1 map

Phillips, John

1829. *Illustrations of the geology of Yorkshire; or a description of the strata and organic remains of the Yorkshire coast*. Part I, xvi + 192 pp., 23 pls.
1835. *Ibid.*, 2d ed., 184 pp., 23 pls.

Pilkington, William

1804. *Description of some fossil shells found in Hampshire*. Linn. Soc. London, Trans., vol. 7, pp. 116-118, pl. 11

Pilsbry, Henry Augustus

1888. *Manual of Conchology* . . . , Phasianellinae, Turbinidae, Delphinulinae, vol. 10
1896. *Ibid.* Philinidae, Gastropteridae, Aglajidae, Aplysiidae, Oxynocidae, Runcinidae, Umbraculidae, Pleurobranchidae, vol. 16
1912. See Brown, A. P., and Pilsbry, H. A.
1922. *Revision of W. M. Gabb's Tertiary Mollusca of Santo Domingo*. Acad. Nat. Sci. Philadelphia, Proc. 1921, pp. 305-435. pls. 16-47, text figs. 1-48
1953. *The Vitrinellidae*. Pp. 411-438, pls. 49-56 in Olsson, A. A. and Harbison, Anne, *Pliocene Mollusca of southern Florida* . . . Acad. Nat. Sci. Philadelphia, Mon. 8, 457 pp., 65 pls.

Pilsbry, Henry Augustus, and Johnson, Charles Willison

1892. *Catalogue of Fissurellidae of the United States*. Nautilus, vol. 5, No. 9, pp. 102-107, 113

Pilsbry, H. A., and Olsson, A. A.

1954. *Systems of Volutidae*. Bull. Amer. Paleont., vol. 35, No. 152, 36 pp., 4 pls.

Pilsbry, Henry Augustus, and Sharp, Benjamin

1898. *Manual of Conchology. Scaphopoda*. Vol. 17, 348 pp., 48 pls.

Plummer, Frederick Byron

1933. *The geology of Texas*. Part 3, *Cenozoic systems in Texas*. Univ. Texas Bull. 3232, pp. 519-818, 27 figs. incl. maps, 4 pls.

Plummer, Helen Jeanne

1933. *Foraminiferal evidence of the Midway-Wilcox contact in Texas*. Univ. Texas Bull. 3201, pp. 51-68, pl. 5

Price, William Armstrong, and Palmer, Katherine Van Winkle

1928. *A new fauna from the Cook Mountain Eocene near Smithville, Bastrop County, Texas*. Jour. Paleont., vol. 2, No. 1, pp. 20-31, pls. 6-7

Puffer, Elton L.

1953. See under Emerson, W. K., and Puffer, E. L.

Quenstedt, Werner

1962. *Fossilium Catalogus*. I. *Animalia*. Pars 100. *Solenomyidae*. F. Westphal, ed., Gravenhage, 46 pp.

Raincourt, de

1884. *Note sur les gisements fossilifères des sables moyens*. Soc. géol. France, Bull., 3d ser., vol. 12, pp. 340-346

Rainwater, Edward Harriman

1960. *Paleocene of the Gulf Coastal Plain of the United States of America*. Report of the Twenty-first session Norden. Part V. *The Cretaceous-Tertiary Boundary*. International Geological Congress, pp. 97-116, 6 figs.

Ravenel, Edmund

1844. *Description of some new species of fossil organic remains, from the Eocene of South Carolina*. Acad. Nat. Sci. Philadelphia, Proc. 1844, vol. 2, pp. 96-98

Redfield, John Howard

1871. *Catalogue of the known species, Recent and fossil, of the family Marginellidae*. Amer. Jour. Conch., vol. 6, Part 2, App., pp. 215-269

Reeside, John Bernard, Jr.

1924. *A new nautiloid cephalopod Eutrephoceras sloani, from the Eocene of South Carolina*. U.S. Nat. Mus., Proc., vol. 65, No. 2518, pp. 1-4, pls. 1-3

Reeve, Lovell Augustus

1844. *Conchologia Iconica: or Illustrations of the shells of molluscous animals*. (Cont'd. by G. B. Sowerby, II) London, 20 vols.

1843. Vol. 1, 122 pls. (1843-1849)

1843a. Vol. 2, 114 pls. (1843-1845)

1845. Vol. 3, 129 pls. (1845-1847)

1847. Vol. 4, 110 pls. (1846-1848)

1849. Vol. 5, 147 pls. (1848-1849)

1851. Vol. 6, 129 pls. (1849-1851)

1854. Vol. 7, 210 pls. (1851-1854)

1855. Vol. 8, 153 pls. (1852-1855)

1856. Vol. 9, 119 pls. (1855-1856)

1858. Vol. 10, 126 pls. (1856-1858)

1859. Vol. 11, 126 pls. (1858-1859)

1860. Vol. 12, 130 pls. (1859-1861)

1862. Vol. 13, 126 pls. (1860-1862)

1864. Vol. 14, 140 pls. (1862-1864)

1866. Vol. 15, first part, 69 pls. (1864-)

Vol. 15, last part, 52 pls. (-1866) cont'd by G. B. Sowerby II

1868. Vol. 16, 127 pls. (1866-1868)

1870. Vol. 17, 123 pls. (1866-1870)
1873. Vol. 18, 127 pls. (1870-1872)
1874. Vol. 19, 180 pls. (1873-1874)
1878. Vol. 20, 177 pls. (1875-1878)
1844a. *Descriptions of new species of Arca, chiefly collected by H. Cum-
ing, Esq. in the Philippine Islands.* Zool. Soc. London, Proc. 1844, pt. 12,
pp. 123-128
1845a. *Descriptions of new species shells.* Zool. Soc. London, Proc. 1845,
pt. 13, pp. 108-119

Reeve, Lovell Augustus

- 1848 [1850]. See under Adams, A., and Reeve, L. A.

Reinhart, Philip Wingate

1935. *Classification of the pelecypod family Arcidae.* Musée roy. d'His-
toire Nat. Belgique, Bull., t. 11, No. 13, 68 pp., 4 pls.
1943. *Mesozoic and Genozoic Arcidae from the Pacific slope of North
America.* Geol. Soc. America, Special Paper No. 47, 117 pp., 15 pls.

Renick, Brink Coleman, and Stenzel, Henryk Bronislaw

1931. *The lower Claiborne on the Brazos River, Texas.* Univ. Texas Bull.
3101, pp. 73-108, text figs. 9-11, pls. 6-7, tables 1-2

Requien, Espirit [R., E.]

1848. *Catalogue des Coquilles de l'Ile de Corse.* Pp. 120

Richards, Horace Gardiner

1943. *Additions to the fauna of the Trent marl of North Carolina.* Jour.
Paleont., vol. 17, No. 5, pp. 518-526, pls. 84-86
1946. *A gastropod of the genus Velates from the Florida Eocene.* Acad.
Nat. Sci. Philadelphia, Not. Nat. No. 177, 6 pp., 2 pls.
1947. *Invertebrate fossils from deep wells along the Atlantic Coastal
Plain.* Jour. Paleont., vol. 21, No. 1, pp. 23-37, pls. 11-15
1948. *Tertiary invertebrate fossils from newly discovered localities in
North and South Carolina; Part 1.* Acad. Nat. Sci. Philadelphia, Not.
Nat. No. 207, pp. 1-11, pls. 1-4
1950. *Geology of the coastal plain of North Carolina.* Amer. Philos. Soc.,
Trans., n. s., vol. 40, pt. 1, pp. 1-83, figs. 1-76
1958. *Cretaceous Pelecypoda of New Jersey.* Pp. 59-266, pls. 10-43 in
Richards, et al., *The Cretaceous fossils of New Jersey.* Pt. I. vi +
266 pp., 46 pls.

Richards, Horace Gardiner, and Palmer, Katherine Van Winkle

1953. *Eocene Mollusks from Citrus and Levy counties, Florida.* Florida
Geol. Sur., Geol. Bull., No. 35, pp. 1-95, pls. 1-13

Richards, Horace Gardiner, et al.

1958. *The Cretaceous fossils of New Jersey.* Part I. Dept. of Conservation
and Economic Development. Trenton, N.J., 266 pp., 46 pls.
1962. *Ibid.* Part II. Pp. 1-237, pls. 47-94

Risso, Antoine

1826. *Histoire naturelle des principales productions de l'Europe méri-*

dionale et particulièrement de celles des environs de Nice et des Alpes Maritimes. Paris. Vol. 4, 439 pp., 12 pls.

Roberts, Joseph Kent

1942. *Annotated geological bibliography of Virginia.* Univ. Virginia Bibliographical Series, No. 2, Richmond, Va., 726 pp.

Rodda, Peter Ulisse

1961. See Fisher, W. L., and Rodda, P. U.

1964. See Fisher, W. L., and Rodda, P. U.

Rodda, P. U., and Fisher, W. L.

1964. *Evolutionary features of Athleta (Eocene, Gastropoda) from the Gulf Coastal Plain.* *Evolution*, vol. 18, No. 2, pp. 235-244

Roeding, Peter Friedrich [Röding]

1798. In Bolton, Joachim Friedrich

Roemer, Carl Ferdinand von

1849. *Texas.* Bonn, xiv + 464 pp., map

1852. *Die Kreidebildungen von Texas und ihre organischen Einschlüsse* . . . Bonn, vi + 100 pp., 11 pls.

Roemer, Friedrich Adolph

1836. *Die Versteinerungen des Norddeutschen Oolithen-Gebirges.* Hannover, 218 pp., 16 pls.

Rogers, William Barton

1835. *Further observations on the Green Sand and Calcareous marl of Virginia.* *Farmers Register*, May 1835, vol. 3, No. 12, pp. 747-751. (Reprint in *Annual reports . . . the Geology of the Virginias*, 1884, pp. 11-20)

1884. *A reprint of annual reports . . . the Geology of the Virginias.* Edited by Emma Rogers. Pp. 832, 5 pls.

Rogers, William Barton, and Rogers, Henry Darwin

1837. *Contributions to the geology of the Tertiary formations of Virginia.* Amer. Philos. Soc., Trans., n.s., vol. 5, pp. 319-341, pls. 26-27. (Pp. 331-341 reprinted in *The Geology of the Virginias*, pp. 661-668, pls. 1-2)

1839a. *Contributions to the geology of the Tertiary formations of Virginia.* Second series. Amer. Philos. Soc., Trans., n.s., vol. 6, Art. 13, pp. 347-370

1839b. *Ibid.* Cont'd. Amer. Philos. Soc., Trans., n.s., vol. 6, Art. 14, pp. 371-377, pls. 28-30. (Reprint in Rogers, W. B., *The Geology of the Virginias*. Pp. 669-672, pls. 3-5)

Roualt, Alexandre

1850. *Description des fossiles du Terrain Éocène des environs de Pau.* Soc. géol. France, Mem., 2d ser., t. 3, pt. 1, Mem. 7, pp. 457-502, pls. 14-18

Rowland, Helen

See, Tucker-Rowland, Helen I.

Rutsch, Rolf

1930. *Einige interessante Gastropoden aus dem Tertiär de Staaten Falcón und Lara (Venezuela)*. *Eclogae Geologicae Helvetiae*, vol. 23, No. 2, pp. 604-614, pl. 17.
- 1936a. *Beiträge zur Kenntnis tropisch-amerikanischer Tertiärmollusken*. IV. *Die stratigraphische Bedeutung der Venericardia planicosta und ihrer Verwandten*. *Eclogae Geologicae Helvetiae*, vol. 29, No. 1, pp. 151-186, pl. 16.
- 1936b. *Ibid.* V. *Ist Venericardia beaumonti auf die Oberkreide beschränkt?* *Eclogae Geologicae Helvetiae*, vol. 29, No. 1, pp. 187-207, pl. 17.
1943. *Die Paleocaen-Mollusken der Inseln Trinidad und Soldado Rock (Britisch Westindien)*. *Eclogae Geologicae Helvetiae*, vol. 36, No. 2, pp. 139-192, pls. 3-5, text fig.

Sacco, Frederico

- 1889-1904. *I Molluschi dei terreni Terziarii del Piemonte e della Liguria*. Reale Accad. Sci. Torino, Mem. (reprinted separately 1890-1904)
1889. (1890a) Pt. 6, *Volutidae, Marginellidae, Columbidae*. *Ibid.*, mem., 2d ser., vol. 40, pp. 295-368, 2 pls. (reprint, 1890a, 76 pp., 140 figs.)
- 1890b. Pt. 7, *Harpidae, Cassidae*, 96 pp., 120 figs.
- 1891a. Pt. 8, *Galeodoliidae, Doliidae, Ficulidae, Naticidae*, 114 pp., 217 figs.
- 1891b. Pt. 9, *Naticidae, Sculariidae, Aclidae*, 104 pp., 257 figs.
- 1891c. Pt. 10, *Cassidae, Terebridae, Pusionellidae*, 69 pp., 171 figs.
- 1892a. Pt. 11, *Eulimidae, Pyramidellidae*, 100 pp., 320 figs.
- 1892b. Pt. 12, *Pyramidellidae, Ringiculidae, Solariidae, Sculariidae*, 88 pp., 296 figs.
- 1893a. Pt. 13, fasc. 1. *Conidae*, 56 pp., 46 figs.
- 1893b. Pt. 13, fasc. 2. *Conidae, Conorbidae*, 143 pp., 450 figs.
- 1893c. Pt. 14, *Strombidae, Terebellidae, Chenopidae, Halidae*, 40 pp., 106 figs.
- 1894a. Pt. 15, *Cypraeidae, Amphiperasidae*, 74 pp., 250 figs.
- 1894b. Pt. 16, *Cancellariidae*, 82 pp., 368 figs.
- 1895a. Pt. 17, *Cerithiidae, Triforidae, Cerithiopsidae, Diastomidae*, 86 pp., 370 figs.
- 1895b. Pt. 18, *Melaniidae through Valvatidae*, 52 pp., 228 figs.
- 1895c. Pt. 19, *Turritellidae, Mathildidae*, 46 pp., 193 figs.
- 1896a. Pt. 20, *Caecidae through Neritopsidae*, 65 pp., 334 figs.
- 1896b. Pt. 21, *Naricidae through Tornidae*, 65 pp., 480 figs.
- 1897a. Pt. 22, *Pleurotomariidae through Scaphopoda*, 148 pp., 923 figs.
- 1897b. Pt. 23, *Ostreidae, Anomyidae, Dimyidae*, 66 pp., 328 figs.
- 1897c. Pt. 24, *Pectinidae*, 116 pp., 636 figs.
- 1898a. Pt. 25, *Spondyliidae through Dreissensiidae*, 76 pp., 215 figs.
- 1898b. Pt. 26, *Arcidae, Pectunculidae, Limopsidae, Nuculidae, Ledidae, Malletidae*, 92 pp., 431 figs.
1899. Pt. 27, *Unionidae through Chamidae*, 102 pp., 481 figs.
1900. Pt. 28, *Isocardiidae through Sphaeridae*, 98 pp., 440 figs.
1901. Pt. 29, *Donacidae through Clavagellidae*, 216 pp., 1043 figs.
1904. Pt. 30, Index, 300 pp., 1400 figs.

Safford, James Merrill

1864. *On the Cretaceous and superior formations of west Tennessee*. Amer. Jour. Sci., 2d ser., vol. 37, pp. 360-372
1869. *Geology of Tennessee*. Nashville, 550 pp., map

Sagra, Ramon de la

1841-1853? *Histoire physique, politique et naturelle de l'île de Cuba*. See d'Orbigny, A., 1841c-1853c?

Salliday, James R.

1961. See under DuBar, J. R., and Salliday, J. R.

Sandberger, Guido

1842. *Vorläufige Übersicht über die eigenthümlichen bei Villmar an der Lahn auftretenden jüngeren Kalk-Schichten der älteren (sog. Übergangs-) Formation . . .* Neues Jahrbuch für Mineralogie, Jahrgang 1942, pp. 379-402, pl. 8B

Say, Thomas

1820. *Observations on some species of Zoophytes, shells etc. principally fossil*. Amer. Jour. Sci. and Arts., vol. 2, pp. 34-45 (reprint Bull. Amer. Paleont., 1896, vol. 1, No. 5, pp. 12-23)

1822. *An account of the marine shells of the United States*. Acad. Nat. Sci. Philadelphia, Jour., vol. 2, pp. 221-248; 257-276; 302-325 (reprint by W. G. Binney, 1858, pp. 87-97)

1824a. *Fossil shells found in a shell mass from Anastasia Island [Florida]*. Acad. Nat. Sci. Philadelphia, Jour., vol. 4, pp. 78-80 (reprint Bull. Amer. Paleont., vol. 1, No. 5, pp. 26-28)

1824b. *An account of some of the fossil shells of Maryland*. Acad. Nat. Sci. Philadelphia, Jour., vol. 4, pp. 124-155 (reprint Bull. Amer. Paleont., vol. 1, No. 5, pp. 30-61)

Schenck, Hubert Gregory

1926. *Cassididae of western America*. Univ. California Pub., Geol. Sci. Bull., vol. 16, No. 4, pp. 69-98, 1 fig., 4 pls.

1931. *Cephalopods of the genus Aturia from western North America*. Univ. California Pub., Geol. Sci., Bull., vol. 19, No. 19, pp. 435-490, pls. 66-78

1934. *Classification of nuculid pelecypods*. Musée roy. d'Histoire Nat. de Belgique, Bull., t. 10, No. 20, 78 pp., 5 pls.

1944. *Lamellinuclula, a new subgenus of nuculid pelecypods*. Jour. Paleont., vol. 18, No. 1, pp. 97-99, 1 text fig.

Schilder, Franz Aldred

1926. *Additions and corrections to Vredenberg's classification of the Cypraeidae*. Records Geol. Sur. India, vol. 58, pt. 4, pp. 358-379

1927. *Revision der Cypracacea*. Archiv Naturg., 91 Abt. A, Heft 10, 171 pp. (Date corrected, not 1925 as stated on title page, Schilder, 1929, p. 310)

1932. *Fossilium Catalogus. I: Animalia*. Pars. 55; *Cypraeacea*. W. Quenstedt, Ed. Berlin, pp. 276

Schroeter, Johann Samuel

1805. *Neue Conchylienarten, Abänderungen, Anmerkungen und Berichtigungen nach den Linneischen System der XII Ausgabe*. Fortsetzung Archiv für Zoologie und Zootomie (C. R. W. Wiedemann), Bd. 4, (Stück 2), pp. 75-137

Schuchert, Charles (assisted by **Dall, W. H., Stanton, T. W., and Bassler, R. S.**)

1905. *Catalogue of the type specimens of fossil invertebrates in the department of geology*. U.S. Nat. Mus., Bull. 53, pt. 1, 704 pp.

Schumacher, Heinrich Christian Friedrich

1817. *Essai d'un nouveau système des habitations des Vers testacés* . . . Copenhagen, pp. iv + 287, 22 pls.

[Sclater, Philip Lutley]

1893. *List of the dates of delivery of the sheets of the Proceedings of the Zoological Society of London, from the commencement in 1830 to 1859 inclusive*. Zool. Soc. London, Proc. 1893, pp. 435-440

Scott, William Berryman

1898. *An introduction to geology*. 1st. ed., New York, Macmillan Co., 573 pp., 12 pls., 169 figs.

1907. *Ibid.*, 2d ed., 816 pp., 17 pls., 311 figs.

1932. *Ibid.*, 3d ed., pt. 1, 604 pp.; pt. 2, 485 pp., 27 pls., 389 figs.

Semmens, Douglas Ramsay

1929. *Oil and gas in Alabama*. Alabama Geol. Sur., Spec. Rept. 15, 408 pp., 76 figs.

Sharp, Benjamin

1898. See Pilsbry, H. A., and Sharp, B.

Sherborn, Charles Davies, and Woodward, Bernard Barham

1894. *On the dates of Sowerby's 'Genera of Recent and Fossil Shells.'* Ann. Mag. Nat. Hist., 6th ser., vol. 13, pp. 370, 371

1906. *On the dates of publication of the Natural History portions of the Encyclopédie Méthodique*. Ann Mag. Nat. Hist., 7th ser., vol. 17, pp. 577-582

Sheldon, Pearl Gertrude

1916 [1917]. *Atlantic Slope Arcas*. Palaeont. Amer., vol. 1, No. 1, 101 pp. 16 pls.

Shimer, Hervey Woodburn

1909. See Grabau, A. W., and Shimer, H. W.

1910. See Grabau, A. W., and Shimer, H. W.

Shimer, Hervey Woodburn, and Shrock, Robert Rakes

1944. *Index fossils of North America*. New York and London, John Wiley and Sons, Inc., pp. 837, 303 pls.

Shrock, Robert Rakes

1944. See under Shimer, H. W., and Shrock, R. R.

Shumard, Benjamin Franklin

1860. *Description of new Cretaceous fossils from Texas*. St. Louis Acad. Sci., Trans., vol. 1, pp. 590-610

Sloan, Earle

1908. *Catalogue of the mineral localities of South Carolina*. South Carolina Geol. Sur., 4th ser., Bull. 2, 505 pp.

Smith, Burnett

1906. *Phylogeny of the races of Volutilithes petrosus*. Acad. Nat. Sci. Philadelphia, Proc. 1906, vol. 58, pp. 52-76, pl. 2, 7 text figs.
 1907a. *A contribution to the morphology of Pyrula*. Acad. Nat. Sci. Philadelphia, Proc. 1907., vol. 59, pp. 208-219, 1 pl., text figs.
 1907b. *A new species of Athleta and a note on the morphology of Athleta petrosa*. Acad. Nat. Sci. Philadelphia, Proc. 1907, vol. 59, pp. 229-242, 8 text figs.

Smith, Eugene Allen

1885. *Remarks on a paper of Dr. Otto Meyer on "Species in the Southern Old-Tertiary."* Amer. Jour. Sci., vol. 130, 3d ser., vol. 30, No. 178, pp. 270-275
 1886. *Geological Survey of Alabama*. Bull. No. 1, 85 pp., 9 pls. See also Aldrich, 1886; Meyer, 1886b

Smith, Eugene Allen, and Johnson, Lawrence Clement

1887. *Tertiary and Cretaceous strata of the Tuscaloosa, Tombigbee, and Alabama Rivers*. U.S. Geol. Sur., Bull. No. 43, 189 pp., 15 pls., map

Smith, Eugene Allen, Johnson, Lawrence C., and Langdon, Daniel W., Jr.

1894. *Report on the geology of the coastal plain of Alabama. With contributions to its paleontology by T. H. Aldrich and K. M. Cunningham*. Geol. Sur. Alabama, 759 pp., 29 pls.

Sohl, Norman Frederick

1963. *New gastropod genera from the late Upper Cretaceous of the east Gulf Coast Plain*. Jour. Paleont., vol. 37, No. 4, pp. 747-757, pls. 89, 90

Solander, Daniel Carl

1766. In Brander, Gustavo, 1766, which see

Sowerby, George Brettingham, I

- 1822-1834. *The genera of Recent and fossil shells, for the use of students in conchology and geology*. With original plates by James Sowerby (Nos. i-xvii), cont'd. by James de Carle Sowerby (Nos. xviii-xlii)
 Lefthand column dates by Newton, 1899; righthand column by Sherborn, 1894; see also Sykes, 1906
- | | |
|--|--------------------|
| 1822. Nos. i-ix | 1822 i-ix, xi |
| 1825. Nos. x-xxv | 1823 xii-xxi |
| 1826. Nos. xxvi-xxvii | 1824 xxii-xxiv |
| 1827. Nos. xxviii-xxix | 1825 xxv, xxvi |
| 1828. No. xxx | 1826 xxvii, xxviii |
| 1829. No. xxxi | 1827 xxix |
| 1830. No. xxxii | 1828 xxx-xxxi |
| 1831. Nos. xxxiii-xxxvii | 1831 xxxii-xxxv |
| ?1832. Nos. xxxviii-xxxix | 1832 xxxvi, xxxvii |
| ?1833. No. xl | 1832? xxx, xxxviii |
| 1834. Nos. xli-xlii See Newton, 1891, pp. 321-322 for list of genera in numbers. | 1833? xxxix |

- 1825a. *A catalogue of the shells contained in the collection of the late Earl of Tankerville . . . Appendix, containing descriptions of many new species.* London, 92 pp., 8 pls., App., xxxiv pp.
1833a. [New species of shells collected by Mr. Cuming on the western coast . . . Zool. Soc. London, Proc., pt. 1, pp. 16-22
1833b. *Ibid.* Pp. 34-38
1844. [Description of some new species of *Columbella*, in the collection of H. Cuming, Esq.]. Zool. Soc. London, Proc., 1844, pt. 12, pp. 48-53
1846b. *Descriptions of new species of Marginella.* Zool. Soc. London, Proc. 1846, pp. 95-97

Sowerby, George Brettingham, II

1829. See under Broderip, W. J., and Sowerby, G. B., II
1832a. Title in contents.—[*Characters of new species of Mollusca and Conchifera collected by Mr. Cuming*]. No title in text. Shells exhibited by "Broderip and Sowerby." Zool. Soc. London, Proc. of the Committee of Science and Correspondence of Zool. Soc. London, pt. 2, pp. 51-61
1842-1866. *Thesaurus Conchyliorum or monographs of genera of shells.*
1842-1847. Vol. 1, pp. 1-438, pls. 1-91
1849-1855. Vol. 2, pp. 439-899, pls. 92-186
1857-1866. Vol. 3, pp. 1-323, pls. 187-290

Sowerby, George Brettingham, III

1881. *Description of eight new shells.* Zool. Soc. London, Proc. 1881, pp. 635-639

Sowerby, James

- 1812-1846. *The Mineral Conchology of Great Britain; or coloured figures and description of those remains of testaceous animals or shells which have been preserved at various times and depths in the earth.* London, 7 vols. James Sowerby did Nos. 1-66 to 1822; work to 1846, Nos. 67-113 completed by his son, James de Carle Sowerby, which see. See also Sykes, E. R., 1906 for dates.
1812. Vol. 1, Nos. 1-2, pp. 1-32, pls. 1-9
1813. Vol. 1, Nos. 3-8, pp. 33-96, pls. 10-44
1814. Vol. 1, Nos. 9-14, pp. 97-178, pls. 45-78
1815. Vol. 1, Nos. 15-18, pp. 179-234, pls. 79-102
1815a. Vol. 2, Nos. 19-20, pp. 1-28, pls. 103-114
1816. Vol. 2, Nos. 21-26, pp. 29-116, pls. 115-150
1817. Vol. 2, Nos. 27-32, pp. 117-194, pls. 151-186
1818. Vol. 2, Nos. 33-35, pp. 195-235, pls. 187-203
1818a. Vol. 3, Nos. 36-38, pp. 1-40, pls. 204-221
1819. Vol. 3, Nos. 39-44, pp. 41-98, pls. 222-253
1820. Vol. 3, Nos. 45-47, pp. 99-126, pls. 254-271
1821. Vol. 3, Nos. 48-53, pp. 127-184, pls. 272-306
1821a. Vol. 4, Nos. 54-55, pp. 1-16, pls. 307-318
1822. Vol. 4, Nos. 56-66, pp. 17-114, pls. 319-383
1823-1846. Nos. 67-113 see under James de Carle Sowerby

Sowerby, James de Carle

- 1823-1846. *The Mineral Conchology of Great Britain . . .* see also James Sowerby
1823. Vol. 4, Nos. 67-70, pp. 115-148, pls. 384-407
1823a. Vol. 5, Nos. 71-76, pp. 1-64, pls. 408-443
1824. Vol. 5, Nos. 77-83, pp. 65-138, pls. 444-485

1825. Vol. 5, Nos. 84-86, pp. 139-168, pls. 486-503
 1826. Vol. 6, Nos. 87-93, pp. 1-86, pls. 504-545
 1827. Vol. 6, Nos. 94-99, pp. 87-156, pls. 546-580
 1828. Vol. 6, Nos. 100-102, pp. 157-200, pls. 581-597
 1829. Vol. 6, Nos. 103-104, pp. 201-230
 1835. Vol. 6, No. 105, index
 1840. Vol. 7, Nos. 106-107, pp. 1-8, pls. 610-618
 1841. Vol. 7, No. 108, pp. 9-16, pls. 619-623
 1843. Vol. 7, No. 109, pp. 17-24, pls. 624-628
 1844. Vol. 7, Nos. 110-112, pp. 25-56, pls. 629-643
 1846. Vol. 7, No. 113, pp. 57-80, pls. 644-648
 1835a. App. A. *Descriptive notes respecting the shells figured in Plates XI-XXIII*. Pp. 335-349 in Fitton, W. H., *Observations on some of the strata between the Chalk and the Oxford oolite, in the south-east of England*. Geol. Soc. London, Trans., 2d ser., vol. 4, pp. 103-388, pls. 11-33
 1840a. No title. [Following heading of explanation of pl. 39. No page number. Fossil shells from the coal measures described and engraved by Mr. James de Carle Sowerby, F. L. S.] Geol. Soc. London, Trans., vol. 5, p. [no number], expl. pl. 39, fig. 3 contains description
 1850. *Notes and descriptions of new species (Bracklesham Mollusca)*. Pp. 163-194, pls. 2-9 in Dixon, F., *The geology and fossils of the Tertiary and Cretaceous formations of Sussex*. Brighton, xvi + 422 + xvi pp., 45 pls.
 1878. *Description of, and remarks on, the Tertiary shells from Bracklesham and Selsey*. Pp. 206-241, pls. 2-10 in Dixon, F., and Jones, T. R., *The geology and fossils of the Tertiary and Cretaceous formations of Sussex*. Brighton, 469 pp., 64 pls.

Spath, Leonard Frank

1927. *On the classification of the Tertiary Nautili*. Ann. Mag. Nat. Hist., 9th ser., vol. 20, pp. 424-428

Spieker, Edmund Maute

1922. *The paleontology of the Zorritos formation of the north Peruvian oil fields*. Johns Hopkins University Studies in Geol., No. 3, 196 pp., 10 pls.

Stanton, Timothy William

1891. *Cretaceous and Tertiary strata near Wilmington, N.C.* Amer. Geol., vol. 7, pp. 333-334
 1896. *The faunal relations of the Eocene and Upper Cretaceous of the Pacific Coast*. U.S. Geol. Sur., Ann. Rept. 17, pt. 1, pp. 1005-1069, pls. 63-67

Stenzel, Henryk Bronislaw

1931. See Renick, B. D., and Stenzel, H. B.
 1935. *Nautiloids of the genus Aturia from the Eocene of Texas and Alabama*. Jour. Paleont., vol. 9, No. 7, pp. 551-562, pls. 63-64, figs. 1-6
 1936. *A new formation in the Claiborne group*. Univ. Texas, Bull. 3501, pp. 267-279
 1939. *The geology of Leon County, Texas*. Univ. Texas Pub. 3818, 295 pp., 1 pl., 61 figs.
 1940a. *New Eocene brachiopods from the Gulf and Atlantic Coastal Plain and Tertiary nautiloids from the Gulf Coastal Plain*. Univ. Texas Pub. 3945, pp. 717-794, pls. 34-42
 1940b. *The Yegua problem*. Univ. Texas Pub. 3945, pp. 847-910, pls. 48-50

1941. *The Eocene Dibranchiate Cephalopod genus Belemnosella Naef, 1922*, = *Advena* Palmer, 1937, = *Anevda* Palmer, 1940. Jour. Paleont., vol. 15, No. 1, p. 90
- [1942] *Type invertebrate fossils of North America. Cephalopoda, Eocene, Paleocene*. Cards 1-28, figs. [Cards not dated, received PRI, 1942.] For Gastropoda cards see Stenzel, H. B., and Turner, F. E. [1942]
1945. *Paleoecology of some oysters*. No. 5. *Report of the committee on marine ecology as related to Paleontology, 1944-1945*. No. 5 Division of Geology and Geography National Research Council, Washington, D.C., pp. 37-46 (mimeographed).
1947. *Nomenclatural synopsis of supraspecific groups of the family Ostreidae. (Pelecypoda, Mollusca)*. Jour. Paleont., vol. 21, No. 2, pp. 165-185
1949. *Successional speciation in paleontology: the case of the oysters of the sellaeformis stock*. Reprinted from "Evolution" vol. 3, No. 1. Bur. Ec. Geol. Rept. Invest., No. 3, pp. 34-50
1955. *Ancestors of the quahog*. Jour. Sediment. Petrol., vol. 25, No. 2, p. 145
- 1957a. *Cenozoic mollusks of the West Gulf*. In *Treatise on marine ecology and paleoecology*. Vol. 2. Geol. Soc. America, Mem. 67, pp. 887-892
- 1957b. *Cenozoic nautiloids*. In *Treatise on marine ecology and paleoecology*. Vol. 2. Geol. Soc. America, Mem. 67, p. 893
1959. See Woodring, W. P., 1959

Stenzel, Henryk Bronislaw, Krause, Edwin Koerps, and Twining, John Theodore

1957. *Pelecypoda from the type locality of the Stone City Beds (Middle Eocene) of Texas*. Univ. Texas Pub. 5704, 237 pp., 22 pls., 4 tables, 31 text figs.

Stenzel, Henryk Bronislaw, and Turner, Francis Earl

1940. *The gastropod genera Cryptochorda and Lapparia in the Eocene of the Gulf Coast Plain and Turritellidae from the Paleocene and Eocene of the Gulf Coast*. Univ. Texas Pub. 3945, pp. 795-846, pls. 43-47
- [1942] *Type invertebrate fossils of North America. Gastropoda, Paleocene, Eocene, Oligocene*. Cards 29-121. Gastropoda Cards 1-93, figs. [Cards not dated, received PRI, 1942]

Stephenson, Lloyd William

1912. *The coastal plain of North Carolina. The Cretaceous formations*. Pp. 73-147 in Clark, W. B., Miller, B. L., Stephenson, L. W., Johnson, B. L., and Parker, H. N. North Carolina Geol. Ec. Sur., vol. 3, pp. 552, pls. 42
1923. *The Cretaceous formations of North Carolina. Part I. Invertebrate fossils of the upper Cretaceous formations*. North Carolina Geol. Ec. Sur., vol. 5, 604 pp., 102 pls.
1926. See Adams, G. I., Butts, C., Stephenson, L. W., and Cooke, W.
1927. *Additions to the Upper Cretaceous invertebrate faunas of the Carolinas*. U.S. Nat. Mus., Proc., vol. 72, No. 2706, 25 pp.
1928. See Cooke, C. W., and Stephenson, L. W.
1937. *The stratigraphic significance of Kummelia a new Eocene bivalve genus from New Jersey*. Washington Acad. Sci., Jour., vol. 27, No. 2, pp. 58-64, 8 figs.
1939. *Turritella kellumi, new name for Turritella subtilis Stephenson*. Jour. Paleont., vol. 13, No. 1, p. 99

Stephenson, Lloyd William, and Crider, Albert Foster

1916. *Geology and ground waters of northeastern Arkansas*. U.S. Geol. Sur., Water Supply Paper 399, 315 pp., 10 pls.

Stephenson, Lloyd William and Veatch, Jethro Otto

1915. *Underground waters of the coastal plain of Georgia*. U.S. Geol. Sur., Water Supply Paper 341, 539 pp., 21 pls.

Stewart, Ralph Bentley

1927. *Gabb's California fossil type gastropods*. Acad. Nat. Sci. Philadelphia, Proc. 1926, vol. 78, pp. 287-447, pls. 20-32
1930. *Gabb's California Cretaceous and Tertiary type lamellibranchs*. Acad. Nat. Sci. Philadelphia, Spec. Pub. 3, 314 pp., 17 pls.

Stoliczka, Ferdinand

1868. *Cretaceous fauna of southern India*. Vol. II. *The Gastropoda of the Cretaceous rocks of southern India*. Geol. Sur. India, Mem., Palaeontologia Indica, pp. 204-498, pls. 17-28
1871. *Ibid.* Vol. III. *The Pelecypoda, with a review of all known genera of this class, fossil and Recent*. Geol. Sur. India, Mem., Palaeontologia Indica, xxii + 535 pp., 50 pls.

Sullivan, John Magruder

1939. In Gardner, Julia, 1939a, which see

Sutton, F. A.

1946. *Geology of Maracaibo Basin, Venezuela*. Bull. Amer. Assoc. Petrol. Geol., vol. 30, No. 10, pp. 1621-1741, 9 pls., 11 text figs.

Sykes, Ernest Ruthven

1906. *On the dates of publication of Sowerby's "Mineral Conchology" and "Genera of recent and fossil shells"*. Malacol. Soc. London, Proc. 1906-1907, vol. 7, pp. 191-194

Tappan, Helen

1957. See Loeblich, A. R., and Tappan, Helen

Tarr, Ralph Stockman

1906. *Elementary geology*. New York, Macmillan Co., pp. XXX + 499, 268 figs.

Tate, Ralph

1887. *The scaphopods of the older Tertiary of Australia*. Roy. Soc. Southern Australia, Trans. 1886, vol. 9, pp. 190-194

Tenison-Woods, Julian Edmund

1879. *On some Tertiary fossils from Muddy Creek, western Victoria*. Linnean Soc. New South Wales, Proc., vol. 3, pp. 222-240, pls. 20, 21

Teppner, Wilfried von

1914. *Fossilium Catalogus*. I: *Animalia*. Pars 2. *Lamellibranchiata tertiaria*. I. "Anisomyaria". F. Frech, ed., Berlin, W. Junk, 63 pp.
1922. *Ibid.* Pars. 15. *Lamellibranchiata tertiaria*. II. "Anisomyaria". C. Diener, ed., Berlin, W. Junk, pp. 65-296

Thompson, Marcus Luther

1933. See Miller, A. K., and Thompson, M. L.
1935. See Miller, A. K., and Thompson, M. L.

Thornton, E. Q.

1858. *Reports on portions of the Cretaceous and Tertiary formations*. Pp. 223-252 in Tuomey, M., *Second biennial report on the geology of Alabama*. Pp. 292

Tomlin, John Read Le Brocton

1917. *A systematic list of the Marginellidae*. Malacol. Soc. London, Proc., vol. 12, pp. 242-306
1931. *On the name Mitra lineata*. Nautilus, vol. 45, No. 2, pp. 53-55
1937. *Catalogue of Recent and fossil cones*. Malacol. Soc. London, Proc. 1937, vol. 22, parts 4, 5, pp. 205-330

Toulmin, Lyman Dorgan, and La Moreaux, Philip Elmer

1963. *Stratigraphy along Chattahoochee River, connecting link between Atlantic and the Gulf Coast Plains*. Amer. Assoc. Petrol. Geol., Bull., vol. 47, No. 3, pp. 385-404, 7 figs.

Trowbridge, Arthur Carleton

1923. *A geologic reconnaissance in the Gulf Coastal Plain of Texas near the Rio Grande*. U.S. Geol. Sur., Prof. Paper 131-D, pp. 85-107, 1 pl., (map)
1932. *Tertiary and Quarternary geology of the lower Rio Grande region, Texas*. U.S. Geol. Sur., Bull. No. 837, 260 pp., 76 figs., 20 pls. incl. map

Tryon, George Washington, Jr.

- 1879a-1898a. *Manual of Conchology structural and systematic, with illustrations of the species*. (cont'd. by H. A. Pilsbry, vols. 10-16)
1880a. *Muricinae, Purpurinae*, vol. 2
1881a. *Tritonidae, Fusidae, Buccinidae*, vol. 3
1882a. *Nassariidae*, vol. 4
1883a. *Marginellidae, Olividae, Columbelloidae*, vol. 5
1884a. *Conidae, Pleurotomidae*, vol. 6
1885. *Terebridae, Cancellariidae, Strombidae, Cypraeidae, Doliidae*, vol. 7
1886. *Naticidae, Turbonellidae*, vol. 8
1887. *Solariidae, Ianthinidae, Trichotropidae, Scalariidae, Cerithiidae, Rissoidae, Littorinidae*, vol. 9
1888. *Neritidae, Adeorbidae, Cyclostrematidae, Liotidae*, vol. 10
1882b-1884b. *Structural and systematic Conchology; an introduction to the study of the Mollusca*. 3 vols.
1882b. Vol. 1, 312 pp.
1883b. Vol. 2, 430 pp.
1884b. Vol. 3, 453 pp., 140 pls.

Tryon, G. W., Jr., and Pilsbry, H. A.

1888. *Manual of Conchology* . . . , vol. 10, See Pilsbry, H. A.; see Tryon, G. W., Jr.

Tucker, Helen Ione

1931. *Some new Tertiary Pectens*. Indiana Acad. Sci., Proc. 1930, vol. 40, pp. 243-245, pl. 1
1934. *Some Atlantic Coast Tertiary Pectinidae*. Amer. Midland Nat., vol. 15, No. 5, pp. 612-621, pls. 25-27
1936a. *The Atlantic and Gulf Coast Tertiary Pectinidae of the United States*. Amer. Midland Nat., vol. 17, pp. 471-490, pls. 1-4

- 1936b. *The Atlantic and Gulf Coast Tertiary Pectinidae of the United States*. Amer. Midland Nat., vol. 17, pp. 985-1017, pls. 5-10. Under H. I. Rowland

Tucker-Rowland, Helen Ione

1938. *The Atlantic and Gulf Coast Tertiary Pectinidae of the United States*. Sec. III *Systematic descriptions*. Musée roy. d'Histoire Nat. de Belgique, Mem., 2d ser., fasc. 13, 76 pp., 6 pls.

Turner, Francis Earl

1940. See Stenzel, H. B., and Turner, F. E.

Tuomey, Michael

- 1842a. *Discovery of a chambered univalve fossil in the Eocene Tertiary of James River, Virginia*. Ann. Mag. Nat. Hist., vol. 10, pp. 156-157
 1842b. *Ibid.*, reprinted Amer. Jour. Sci. Arts, vol. 43, p. 187
 1848. *Report on the geology of South Carolina*. Columbia, S.C., pp. vi + 293 + app., illus.
 1850. *Report on the geology of Alabama*. First Biennial Report on the Geology of Alabama. Tuscaloosa, xxxi + 176 pp., map
 1853. *Description of some fossil shells from the Tertiary of the southern states*. Acad. Nat. Sci. Philadelphia, Proc. 1852, vol. 6, pp. 192-194
 1854. *Description of some new fossils from the Cretaceous rocks of the southern states*. Acad. Nat. Sci. Philadelphia, Proc. 1854, vol. 7, pp. 167-172
 1858. *Second biennial report on the geology of Alabama*. Report. Pp. 292, map. Lists of fossils of Appendix III A-F were compiled by Tuomey before his death but completed by J. W. Mallet.

Tuomey, Michael and Holmes, Francis Simmons

1857. *Pleiocene fossils of South Carolina*. Charlestown, S.C., 152 pp., 29 pls.

Twining, John Theodore

1957. See under Stenzel, H. B., Krause, E. K., and Twining, J. T.

Ugolini, Riccardo

1903. *Pettinidi nuovi o poco noti di terreni terziari italiani*. Revista ital. di Paleontologia, vol. 9, fasc. 3, pp. 77-94

Van de Poel, Luc

1955. *Structure du test et classification des Nucules*. Inst. roy. des Sci. Nat. de Belgique, Bull., t. 31, No. 3, 11 pp.

Vanuxem, Lardner

1828. In Morton, Samuel, 1828a, which see
 1842. *On the ancient oyster shell deposits observed near the Atlantic Coast of the United States*. Amer. Jour. Sci., vol. 41, pp. 168-170
 1843. *Ibid.* Reprinted in Assoc. Amer. Geol. Rep., pp. 21-23

Van Winkle, Katherine E. Hilton

- See also under Palmer, Katherine Van Winkle
 1921. *Illustrations and descriptions of fossil Mollusca contained in the paleontological collections at Cornell University*. Bull. Amer. Paleont., vol. 8, No. 38, pp. 3-12, 1 pl.

Van Winkle, Katherine E. H., and Harris, Gilbert Dennison

1919. *New or otherwise interesting Tertiary molluscan species from the east coast of America*. Bull. Amer. Paleont., vol. 8, No. 33, pp. 5-32, pls. 1-3

Vaughan, Thomas Wayland

1895. *The stratigraphy of northwestern Louisiana*. Amer. Geol., vol. 15, No. 4, pp. 205-229
1896. *A brief contribution to the geology and paleontology of northwestern Louisiana*. U.S. Geol. Sur., Bull., No. 142, 65 pp., 4 pls.
1911. See under Veatch, O., and Stephenson, L. W., pp. 239-240
1919a. *Contributions to the geology and paleontology of the West Indies*. Carnegie Inst. Washington, Pub. 291, 184 pp., 53 pls.
1919b. *Contributions to the geology and paleontology of the Canal Zone, Panama . . .* U.S. Nat. Mus., Bull. 103, pp. 547-612

Veatch, Arthur Clifford

1899. See under Harris, G. D., and Veatch, A. C.
1902. *The geography and geology of the Sabine River in a report on the geology of Louisiana*. Part VI. In Harris, G. D., Veatch, A. C., and Pacheco, Jov. A. A., pp. 101-148, pls. 24-37
1906. *Geology and underground water resources of northern Louisiana and southern Arkansas*. U.S. Geol. Sur., Prof. Paper, No. 46, 422 pp., map

Veatch, Jethro Otto

1915. See under Stephenson, L. W., and Veatch, J. O.

Veatch, Jethro Otto, and Stephenson, Lloyd William

1911. *Preliminary report on the geology of the Coastal Plain of Georgia*. Georgia Geol. Sur., Bull., No. 26, 466 pp., 30 pls.

Verastegui, Pedro

1953. *The pelecypod genus Venericardia in the Paleocene and Eocene of western North America*. Palaeont. Amer., vol. 4, No. 25, 112 pp., 22 pls.

Vokes, Emily H.

1963. *Notes on Cenozoic Muricidae from the western Atlantic region, with descriptions of new taxa*. Tulane Studies Geol., vol. 1, No. 4, pp. 151-163, pls. 1, 2
1964. *Supraspecific groups in the subfamilies Muricinae and Tritonalinae (Gastropoda: Muricidae)*. Malacologia, vol. 2, No. 1, pp. 1-41

Vokes, Harold Ernest

1944. *The validity of the molluscan genus Caestocorbula Vincent*. Amer. Jour. Sci., vol. 242, pp. 614-623
1945. *Supraspecific groups of the pelecypod family Corbulidae*. Amer. Mus. Nat. Hist. Bull., vol. 86, Art. 1, pp. 1-32, 4 pls.
1955. *Notes on Tertiary and Recent Solemyacidae*. Jour. Paleont., vol. 29, No. 3, pp. 534-545
1956a. *Notes on, and rectifications of, pelecypod nomenclature*. Jour. Paleont., vol. 30, No. 3, pp. 762-765
1956b. *Some pelecypod illustrations of the effect of the Copenhagen decision defining the limits of generic homonymy*. Jour. Paleont., vol. 30, No. 3, pp. 765-768

1957. *Geography and geology of Maryland*. Dept. of Geology, Mines, and Water Resources, Bull. 19, see Vokes, H. E., 1961
- 1957a. *Miocene fossils of Maryland*. Dept. of Geol., Mines, and Water Resources, Bull. 20, 85 pp., 31 pls.
1961. *Geography and geology of Maryland*. Dept. of Geology, Mines, and Water Resources, Bull. 19, 243 pp., 28 pls. Reprint of Vokes, H. E., 1957
1964. *Margaritariidac, new family (Pelecypoda) and description of two new species*. Tulane Studies Geol., vol. 2, No. 4, pp. 135-141, pl. 1

Wailes, Benjamin Leonard Covington

1854. *Report on the agriculture and geology of Mississippi* . . . Jackson, Miss., 371 pp., 17 pls. *Fossils of the Vicksburg Eocene beds*. Described by T. A. Conrad, p. 287; *Fossil Testacea of the Tertiary green-sand and marl-bed of Jackson, Miss.* Determined and named by T. A. Conrad, p. 289, pls. 14-17. Reprinted in Bull. Amer. Paleont., vol. 24, No. 86, 1939, pp. 10-19, pls. 1-4

Waring, Clarence

1917. *Stratigraphy and faunal relations of the Martinez to the Chico and Tejon of southern California*. California Acad. Sci., Proc., 4th ser., vol. 7, No. 4, pp. 41-124, 10 pls., 3 figs. (incl. maps)

Wasem, Richard, and Wilbert, Louis Joseph, Jr.

1943. *The Pendleton formation, Louisiana and Texas*. Jour. Paleont., vol. 17, No. 2, pp. 181-195, pl. 31

Watts, William L.

1894. *The gas and petroleum yielding formations of the central valley of California*. California State Mining Bur., Bull. No. 3, 100 pp., maps

Weller, Stuart

1907. *A report on the Cretaceous paleontology of New Jersey*. New Jersey Geol. Sur., Paleont. Ser., vol. 4, 1107 pp., 111 pls.

Wenz, Wilhelm

- 1938-1944. *Handbuch der Paläozoologie*. Band 6 *Gastropoda*. Berlin, 7 Teile
- 1838a. Teil 1, Allgemeiner Teil und Prosobranchia Lfg. 1, pp. 1-240
- 1938b. Teil 2, Lfg. 3, pp. 241-480
1939. Teil 3, Prosobranchia Lfg. 4, pp. 481-720
1940. Teil 4, Prosobranchia Lfg. 6, pp. 721-960
1941. Teil 5, Prosobranchia Lfg. 7, pp. 961-1200
1943. Teil 6, Lfg. 8, pp. 1201-1506
1944. Teil 7, Prosobranchia Lfg. 9, pp. i-xii—1507-1639
(Continued by Zilch, Adolf, which see)

Wheeler, Harry Edgar

1909. *A week at Claiborne*. Nautilus, vol. 22, No. 10, pp. 97-98
1910. *A new Claibornian shell*. Nautilus, vol. 24, No. 2, pp. 13-14; No. 7, pl. 4, fig. 6
1935. *Timothy Abbott Conrad, with particular reference to his work in Alabama one hundred years ago*. Bull. Amer. Paleont., vol. 23, No. 77, 157 pp., 27 pls.

White, Charles Abiathar

1882. *On certain Cretaceous fossils from Arkansas and Colorado*. U.S. Nat. Mus., Proc., vol. 4, pp. 136-139, 1 pl.
1883. *A review of the non-marine fossil Mollusca of North America*. Pp. 405-550, 32 pls. in Third Annual Report, U.S. Geol. Sur., 1881-1882, 564 pp., 85 pls.
- 1884a. *A review of the fossil Ostreidae of North America; and a comparison of the fossil with the living forms*. Pp. 273-316, pls. 34-82 in Fourth Annual Report, U.S. Geol. Sur., 1882-1883, 473 pp., 85 pls.
- 1884b. *On the nautiloid genus Euclimatoceras Hyatt, and a description of the type species*. Pp. 16-17, pls. 7-9 in *On Mesozoic fossils*. U.S. Geol. Sur., Bull. No. 4, 36 pp., 9 pls.
1885. *On the Mesozoic and Cenozoic paleontology of California*. U.S. Geol. Sur., Bull. No. 15, pp. 3-33
1888. *Contribution to the paleontology of Brazil; comprising descriptions of Cretaceous invertebrate fossils . . .* Arch. do Museu Nac. do Rio de Janeiro, vol. 7, 273 pp. + v, 28 pls.

Whitfield, Robert Parr

1865. *Descriptions of new species of Eocene fossils*. Amer. Jour. Conch., vol. 1, No. 3, pp. 259-268, pl. 27
1885. *Brachiopoda and Lamellibranchiata of the Raritan clays and green-sand marls of New Jersey*. U.S. Geol. Sur., Mon. 9, pp. xx + 338, 34 pls., map
1892. *Gastropoda and Cephalopoda of the Raritan clays and Greensand marls*. U.S. Geol. Sur., Mon. 18, 402 pp., 50 pls.
1899. *List of fossils, types and figured specimens, used in the palaeontological work of R. P. Whitfield, showing where they are probably to be found at the present time*. Ann. New York Acad. Sci., vol. 12, No. 8, pp. 139-186
1905. *Notice of a new species of Fasciolaria from the Eocene green marls at Shark River, N.J.* Amer. Mus. Nat. Hist., Bull., No. 21, pp. 301-303, 2 pls.

Whitfield, Robert Parr, and Hovey, Edmund Otis

1901. *Catalogue of the types and figured specimens in the palaeontological collection of the Geological Department American Museum of Natural History*. Amer. Mus. Nat. Hist., Bull., vol. 11, pt. 4, pp. 358-500

Wilbert, Louis Joseph, Jr.

1943. See Wasem, Richard, and Wilbert, Louis J., Jr.
1953. *The Jacksonian stage in southeastern Arkansas*. Arkansas Resources and Development Commission, Div. of Geol., Bull. No. 19, pp. 125, pls. 1-2

Winckworth, Ronald

1945. *The types of the Boltenian genera*. Malacol. Soc. London, Proc., vol. 26, pts. 4, 5, pp. 136-148

Wissmann, Heinrich Ludolf, and Muenster, Georg

1841. *Beiträge zur Geognosie und Petrefacten-Kunde des südöstlichen Trias vorzüglich der Schichten von St. Cassian*. Beiträge zur Petrefacten-Kunde, Heft IV, 152 pp., 16 pls.

Woodring, Wendell Phillips

1928. *Miocene mollusks from Bowden, Jamaica*. Pt. II. *Gastropods and discussion of results*. Carnegie Inst. Washington, Pub. No. 385, 564 pp., 40 pls.

1957. *Geology and paleontology of Canal Zone and adjoining parts of Panama. Geology and description of Tertiary mollusks (gastropods: Trochidae to Turritellidae)* U.S. Geol. Sur., Prof. Paper No. 306-A, 146 pp., 23 pls.
1959. *Geology and paleontology of Canal Zone and adjoining parts of Panama. Description of Tertiary mollusks (Gastropods: Vermetidae to Thaididae)* U.S. Geol. Sur., Prof. Paper, No. 306-B, pp. 147-239, pls. 24-38
1964. *Geology and paleontology of Canal Zone and adjoining parts of Panama. Description of Tertiary mollusks (Gastropods: Columbelliidae to Voluticae)*. U.S. Geol. Sur., Prof. Paper 306-C, pp. [237] 237-297, pls. 39-47

Woods, Henry

1922. *Mollusca from the Eocene and Miocene deposits of Peru*. Pp. 51-113, pls. 1-20 in Bosworth, T. O., London, Macmillan and Co., 434 pp., 26 pls., 150 text figs.

Woods, Searles Valentine

1871. *A monograph of the Eocene Mollusca or descriptions of shells from the older Tertiaries of England. Bivalves*. Palaeont. Soc. London, Mon., vol. 24, issued for 1870, pp. 137-182, pls. 21-25

Woodward, Bernard Barham

1906. See Sherborn, C. D., and Woodward, B. B.

Woodward, Samuel

1833. *Outline of the geology of Norfolk*. Norwich, iv + 54 + 6 pp., 6 pls., 5 maps

Wrigley, Arthur

1927. *Notes on English Eocene Mollusca, with descriptions of new species*. Malacol. Soc. London, Proc. 1927, vol. 17, pts. 5, 6, pp. 216-249, pls. 33-35
1929. *Notes on English Eocene Mollusca, with descriptions of new species*. Malacol. Soc. London, Proc., vol. 18, pt. 5, pp. 235-251, pls. 15-16
1930. *Notes on English Eocene and Oligocene Mollusca with descriptions of new species*. Malacol. Soc. London, Proc. 1930, vol. 19, pt. 3, pp. 91-115, pls. 9-10
1932. *English Eocene species of Sassia, with a note on the morphology of the Cymatiidae and the Bursidae*. Malacol. Soc. London, Proc., vol. 20, pt. 2, pp. 127-140 pls. 10, 11
1934. *English Eocene and Oligocene Cassididae, with notes on the nomenclature and morphology of the family*. Malacol. Soc. London, Proc., vol. 21, pt. 2, pp. 108-130, pls. 15-17
1938. *English Eocene and Oligocene Strombiae and Aporrhaidae*. Malacol. Soc. London, Proc., vol. 23, pt. 2, pp. 61-88, pls. 4-6
1939. *English Eocene Surculites*. Malacol. Soc. London, Proc. 1939, vol. 23, pt. 5, pp. 277-284, pl. 18

Zilch, Adolf

1959. *Handbuch der Paläozoologie*. Band 6. *Gastropoda*. Teil 2, Lfg. 1 *Euthyneura*. Pp. 200, 701 figs.

GLOSSARY OF STRATIGRAPHIC TERMS USED IN THIS
CATALOGUE

The notes are written in the following sequence: name of formation as presently used, author, original date with publication, type locality, and age. For further details see Wilmarth, 1938, U.S.G.S., Bull. 896; Wilson, *et al.*, 1957, U.S.G.S., Bull. 1056 A, and Fisher, 1961

- Aquia fm.*—W. B. Clark and G. C. Martin, 1901, Md. Geol. Sur., Eocene, p. 58, Aquia Creek, Safford Co., Va., Paleocene.
- Archusa ml. mem.*—E. P. Thomas, 1942, Miss. Geol. Sur., Bull. 48, pp. 49-52, Archusa Springs, Chickasawhay R., S. of Quitman, Clarke Co., Miss., middle Eocene, Cook Mt. fm., middle Claiborne gr.
- Avon Park ls.*—P. L. and E. R. Applin, 1944, A.A.P.G., Bull., vol. 28, No. 12, pp. 1680, 1686-1688, subsurface, Avon Park Bombing Range, Polk Co., Fla., middle Eocene, upper Claiborne gr.
- Barnwell fm.*—E. Sloan, 1905, S.C. Geol. Sur., geognostic map S.C.; 1907, Sum. Min. Res. S.C., pp. 12, 17; 1908, S.C. Geol. Sur., ser. 4, Bull. 2, p. 454, Barnwell Co., S.C., upper Eocene, Jackson gr.
- Bashi mem.*—A. Heilprin, 1882, Acad. Nat. Sci., Phila., Proc. for 1881, pp. 158, 159, Bashi Creek, Clarke Co., Ala., lower Eocene, Hatchetigbee fm., upper Wilcox [Sabine] gr.
- Bells Landing mem.*—E. A. Smith, 1883, Ala. Geol. Sur., Prog. Rept. for 1881-1882, pp. 256, 321, Bells Landing, Alabama R., Monroe Co. Ala., lower Eocene, Tusahoma fm., middle Wilcox [Sabine] gr.
- Black Mingo fm.*—E. Sloan, 1905, S.C. Geol. Sur., geognostic map S.C.; 1907, Sum. Min. Res. S.C., pp. 12, 16, Black Mingo Creek, Black R., Clarendon Co., S.C., lower Eocene.
- Bumpnose ls.*—W. E. Moore, 1955, Fla. Geol. Sur., Bull. 37, p. 30 along Bumpnose rd., N. and W. of Marianna, Jackson Co., Fla., upper Eocene, upper Ocala gr. (uppermost Jackson Eocene).
- Cane R. [glauconitic ml.] fm.*—W. C. Spooner, 1926, A.A.P.G., Bull., vol. 10, No. 1, p. 7; No. 3, pp. 220, 224, 227, 235, 236, Cane R. at Natchitoches, Natchitoches Par., La., middle Eocene, middle Claiborne gr.
- Castle Hayne ls.*—B. L. Miller, 1910, G.S.A., Bull., vol. 20, pp. 674-675, Castle Hayne, New Hanover Co., N.C., upper Eocene, Jackson gr.
- Claiborne gr.*—"Claiborne sands", T. A. Conrad, 1847, Acad. Nat. Sci., Phila., Proc., vol. 3, pp. 280-282 not described, Claiborne Bluff, Alabama R., Monroe Co., Ala., middle Eocene. "Claiborne sand" replaced by Gosport sd., Smith, 1907.
- Clayton fm.*—D. W. Langdon, 1891, G.S.A., Bull., vol. 2, pp. 589-605, Clayton, Barbour Co., Ala., Paleocene, lower Midway gr.
- Cook Mt. fm.*—W. Kennedy, Texas Geol. Sur., 3d Ann. Rept., pp. 54-57, Cook Mt., Houston Co., Texas, middle Eocene, upper Claiborne gr.
- Cooper ml.*—M. Tuomey, 1848, Agr. Sur. S. C., 1st Rept., pp. 162-169, 190, 211; Sloan, 1908, S. C. Geol. Sur., ser. 4, Bull. 2, p. 462, Cooper R., Berkeley Co., S.C., upper Eocene, Jackson gr. or Oligocene (Cooke and MacNeil, 1952)
- Crockett fm.*—A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1340, proposed by E. A. Wendlandt and G. M. Knebel, Crockett, Houston Co., Texas, middle Eocene, upper Claiborne gr. Upper part replaced by Cook Mt., see Stenzel, Krause, and Twining, 1957, p. 18.

- Crystal River fm.*—H. S. Puri, 1953, Jour. Sed. Petrology, vol. 23, No. 2, p. 130 (abst.), Crystal River, Citrus Co., Fla., upper Eocene, upper Ocala gr.
- Danville Landing beds.*—M. A. Hanna, D. Gravell, and J. McGuirt, 1934, 11th Ann. Field Trip Shreveport Geol. Soc., table 0 pp. 30, pp. 35-37, Danville Landing, Ouachita R., Catahoula Par., La., upper Eocene, uppermost Jackson gr.
- Fayette beds.*—E. T. Dumble and R. A. F. Penrose, Jr., 1890, Texas Geol. Sur., 1st Ann. Rept., pl. 3, pp. XXXIII, 17, 47, south of La Grande, Fayette Co., Texas, upper Eocene. Classified as gr. by Murray (1961). (*Fayette breccia* McGee, 1884, for Fayette, Fayette Co., Iowa, Middle Devonian, has priority.)
- Greggs Landing mem.*—E. A. Smith, 1886, Ala. Geol. Sur., Bull. 1, p. 12, Greggs Landing, Alabama R., NW. Monroe Co., Ala., lower Eocene, Tuscahoma fm., middle Wilcox [Sabine] gr.
- Gosport sd.*—E. A. Smith, 1907, Geol. Sur. Ala., Bull. 9, pp. 5, 18, Gosport [bluff], Alabama R., few mi. below Claiborne, Clarke Co., Ala., [famous Claiborne ferruginous, glauconitic sands], middle Eocene, uppermost Claiborne gr.
- Hall Summit fm.*—G. E. Murray, Jr., 1941, (abst.) A.A.P.G., Bull., vol. 25, No. 5, pp. 941, 942; G. E. Murray, Jr., and E. P. Thomas, 1945, A.A.P.G., Bull., vol. 29, No. 1, pp. 58-60, Hall Summit, T. 14 N., R. 9 W., Red River Par., La., Paleocene, upper Midway gr.
- Hatchetigbee fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43, pp. 39-43, Hatchetigbee Bluff, Tombigbee R., N.E. Washington Co., Ala., lower Eocene, upper Wilcox [Sabine] gr.
- Hornerstown fm.*—W. B. Clark, 1907, Johns Hopkins Univ. Circ., n.s., No. 7, whole No. 199, p. 3 (to replace *Sewell* which was preoccupied), Hornerstown, Monmouth Co., N.J., Paleocene.
- Hurricane lentil.*—H. B. Stenzel, 1940, A.A.P.G., Bull., vol. 24, No. 9, pp. 1670-1675 Hurricane Bayou bed of creek 0.2-0.5 mi. up creek from bridge on Crockett-Rusk county rd., 3.55 mi. N.E. of Crockett, Houston Co., Texas, middle Eocene, Landrum mem., Cook Mt. fm., upper Claiborne gr.
- Indio fm.*—A. C. Trowbridge, U.S.G.S., Prof. Pap. 131 D, pp. 89-91, old Indio ranch, Maverick and Dimmit counties, Texas, lower Eocene, Wilcox [Sabine] gr.
- Inglis fm.*—E. O. Vernon, 1951, Fla. Geol. Sur., Bull. 33, pp. 115-140, vicinity of Inglis, along Withlacoochee R., Levy Co., upper Eocene, lower Ocala gr.
- Jackson gr.*—Jackson fm., T. A. Conrad, 1856, Acad. Nat. Sci. Phila., Proc. vol. 7, pp. 257, 258, Jackson, Pearl R. and Moodys Br., Hinds Co., Miss. upper Eocene. Originally as formation.
- Kerens mem.*—F. B. Plummer, Univ. Texas, Bull. 3232, pp. 530, 559, 562, Trinity R., N. of St. Louis and SW. R.R., E. of Kerens, Navarro Co., Texas, Paleocene, Wills Point fm., upper Midway gr.
- Kimbrel bed.*—T. L. Casey, 1902, Sci., n.s., vol. 15, p. 716, T. W. Kimbrel estate, s. of Montgomery, Grant Par., La., upper Eocene, lower Jackson gr.
- Kincaid fm.*—J. A. Gardner, 1933, A.A.P.G., Bull., vol. 17, No. 6, p. 744, Kincaid ranch (Lewis ranch), 3/4 mi. above Bob Evans' apiary to Wills Point contact, to 1/4 mi. below it, Uvalde Co., Texas, lower Midway gr. See under Miscellaneous Stratigraphic Notes.
- Landrum mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Ec. Geol.,

- Pub. 3818, pp. 20, 125, 134-148, Two-Mile Cr., J. L. Landrum survey, near Two-Mile Church, Leon Co., Texas, middle Eocene, Cook Mt. "fm.", upper Claiborne gr.
- Laredo fm.*—J. A. Gardner, 1938, Wash. Acad. Sci., Jour., vol. 28, No. 7, pp. 297, 298, Laredo, Webb Co., Texas, middle Eocene, upper Claiborne gr.
- Lisbon fm.*—T. H. Aldrich 1886, Ala. Geol. Sur., Bull. 1, pp. 44-60, Lisbon Bluff, Alabama R., Monroe Co., (not Clarke Co. as in Wilmarth, 1938, p. 1190), Ala., middle Eocene, middle, upper Claiborne gr. The name Lisbon fm. is preoccupied by Lisbon fm., Hitchcock, 1874, NW. New Hamp., Ordovician or Cambrian, Wilmarth, 1938, p. 1189.
- Littig mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 536, S. side Wilbarger Cr., on road 1 1/2 mi. S-SW. of Littig, Travis Co., Texas, Paleocene, Kincaid fm., lower Midway gr.
- "Logansport fm."*—See under Miscellaneous Stratigraphic notes.
- Manasquan fm.*—W. B. Clark, 1893, N.J. Geol. Sur., Ann. Rept., 1892, pp. 205-208, Manasquan R., Monmouth Co., N.J., lower Eocene.
- Marquez shale mem.*—H. B. Stenzel, 1938, [1939], Texas Univ. Bur. Ec. Geol., Pub. 3818 pp. 71-78, near Marquez, Leon Co., Texas, middle Eocene, Reklaw fm., lower Claiborne gr.
- Marthaville fm.*—B. W. Blanpied and R. T. Hazzard, 1939, Shreveport Geol. Soc. Guidebook, 14th Ann. Field Trip, p. 128, Marthaville, NW. Natchitoches Par., La., lower Eocene, lower Wilcox [Sabine] gr.
- Matthews Landing mem.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43 pp. 57-60, Matthews Landing, Alabama R., Wilcox Co., Ala., Paleocene, Porters Creek fm., upper Midway gr.
- McBean fm.*—J. O. Veatch and L. W. Stephenson, 1911, Ga. Geol. Sur., Bull. 28, pp. 60, 237-284, McBean on McBean Cr., Richmond Co., E. Ga., middle Eocene, upper Claiborne gr.
- Meridian fm.*—W. J. McGee, 1891, U.S.G.S., 12th Ann. Rept., pt. 1, pp. 413-415, 491, Meridian, Lauderdale Co., Miss., middle Eocene, lower Claiborne gr. Replaced by *Tallahatta fm.*
- Mexia mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 559, 561, clay pit, brickyard, W. Mexia, Limestone Co., Texas, Paleocene, Wills Point fm., upper Midway gr.
- Midway gr.*—G. D. Harris, 1894, Amer. Jour. Sci., 3d ser., vol. 47, pp. 303, 304; 1896, Bull. Amer. Paleont., vol. 1, No. 4, pp. 10-38, Midway Landing, Alabama R., Wilcox Co., Ala., Paleocene. Has been used as fm.
- Moodys Branch fm.*—O. Meyer, 1885, Amer. Jr. Sci., 3d ser., vol. 30, p. 435, Moodys Branch, Pearl R., Jackson, Hinds Co., Miss., upper Eocene, lower Jackson gr.
- Mount Selman fm.*—W. Kennedy, 1892, Texas Geol. Sur., 3d Ann. Rept., pp. 45, 52-54, Mount Selman, Cherokee Co., Texas, middle Eocene, middle Claiborne gr.
- Mount Tabor sh. mem.*—H. B. Stenzel, 1938 [1939], Univ. Texas, Bur. Ec. Geol., Geol. Pub. 3818, pp. 151-154, Mount Tabor school cemetery, E. side U.S. highway 75, Madison Co., Texas, middle Eocene, Cook Mt. fm., upper Claiborne gr.
- Naheola fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43, pp. 57-60, Naheola, Tombigbee R., Choctaw Co., Ala., Paleocene, upper Midway gr.
- Nanajalia fm.*—E. A. Smith and L. C. Johnson, 1887, U.S.G.S., Bull. 43,

- pp. 51-57, Nanafalia Landing, Tombigbee R., Marengo Co., Ala., lower Eocene, lower Wilcox [Sabine] gr.
- Nanjemoy fm.*—W. B. Clark and G. C. Martin, 1901, Md. Geol. Sur., Eocene, p. 58, Nanjemoy Cr., Charles Co., Md., lower Eocene.
- Ocala ls.*—W. H. Dall, 1892, U.S.G.S., Bull. 84, pp. 103, 157, 331, Ocala, Marion Co., Fla., Upper Eocene, Jackson gr., "Ocala gr."
- Pendleton Ferry fm.*—See Miscellaneous Stratigraphic notes.
- Pisgah mem.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 535, 536, 540, Pisgah Ridge, Navarro Co., on road between Richland and Wortham, 6 mi. N. of Limestone Co. line, Texas, Paleocene, Kincaid fm., lower Midway gr.
- Porters Creek fm.*—J. M. Safford, 1864, Amer. Jour. Sci., 2d ser., vol. 37, pp. 361, 368, Porters Creek, W. of Middleton, Hardeman Co., Tenn., Paleocene, upper Midway gr., see *Sucarnoochee clay* in Ala.
- Queen City fm.*—W. Kennedy, 1892, Texas Geol. Sur., 3d Ann. Rept., pp. 50-52, Queen City, Cass Co., Texas, middle Eocene, lower Claiborne gr.
- Reklaw fm.*—E. A. Wendlandt and G. M. Knebel in A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1342, Reklaw, Cherokee Co., Texas, middle Eocene, lower Claiborne gr.
- [*Sabine gr.*].—A. C. Veatch, 1905, La. Geol. Sur., Bull. 1, pt. 2, pp. 84, 85, 88, Sabine River, Sabine Co., Texas and Sabine Par., La., lower Eocene. Sabine fm. replaced by U.S.G.S. with Wilcox. See Wilmarth, 1938, pt. 2, p. 1862 for history. The name has priority over Wilcox.
- Sabinetown fm.*—F. B. Plummer, 1933, Univ. Texas, Bull. 3232, pp. 530, 602, Sabinetown Bluff, Sabine R., Sabine Co., Texas, lower Eocene, upper Wilcox [Sabine] gr.
- Saline Bayou mem.*—A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1339, Saline Bayou, St. Maurice, Winn Par., La., middle Eocene, upper Cook Mt. fm., upper Claiborne gr.
- Santee ls.*—E. Sloan, 1905, S.C. Geol. Sur. geognostic map, [published 1908, S.C. Geol. Sur., ser. 4, Bull. 2], Santee R., South Carolina [unofficially Eutaw Springs, Orangeburg Co.], (formerly regarded as Jackson upper Eocene), middle Eocene, upper Claiborne group (Cooke and MacNeil, 1952).
- Sequin fm.*—F. B. Plummer, 1933, *ibid.*, p. 574, Moss Branch, 10 mi. NW. of Bastrop, 1 mi. N. of old Caldwell village, Bastrop Co., Texas, lower Eocene, lowermost Wilcox [Sabine] gr.
- Shark River ml.*—T. A. Conrad, 1865f, Acad. Nat. Sci. Phila., Proc., vol. 17, pp. 70-73, Shark River, Monmouth Co., N.J., middle Eocene, upper Claiborne gr.
- Stone City beds.*—H. B. Stenzel, 1936, Univ. Texas, Bull. 3501, pp. 267-279, Stone City Bluff (Moseley's Ferry or San Antonio Ferry), Brazos R., Burleson Co., Texas, middle Eocene middle Claiborne gr.
- Sucarnoochee cl.*—E. A., Smith 1892, Sketch Geol. Ala., pam., 36 pp., Birmingham, Ala., Black Bluff, Sucarnoochee Cr., Sumter Co., Ala., Paleocene, upper Midway gr. Part of Porters Creek fm.
- Tallahatta fm.*—W. H. Dall, 1898, U.S.G.S., 18th Ann. Rept., pt. 2, p. 344 chart opp. p. 334, Tallahatta Hills, Choctaw Co., Ala., middle Eocene, lower Claiborne gr.
- Tehuacana mem.*—G. D. Harris, 1896, Bull. Amer. Paleont., vol. 1, No. 4, pp. 129, 155, Tehuacana, Limestone Co., Texas, Paleocene, Kincaid fm., lower Midway gr.

- Tullos mem.*—H. N. Fisk, 1938, La. Dept. Cons., Geol. Bull. 10, pp. 78, 98, 99, Tullos, La Salle Par., La., upper Eocene, Yazoo clay, upper Jackson gr.
- Tusahoma fm.*—E. A. Smith, 1888, Ala. Geol. Sur. Rept. Prog., 1884-88, geog. map. Ala., Tusahoma, Tombigbee R., Choctaw Co., Ala., lower Eocene, middle Wilcox [Sabine] gr.
- Tyus mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, p. 101, cut abandoned Houston and Texas Cen. R.R., 0.4 mi. N. Robbins crossroads, Leon Co., Texas, middle Eocene, Weches fm., middle Claiborne gr.
- Viesca mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, pp. 20, 97, 104-107, Texas, middle Eocene, Weches fm., middle Claiborne gr.
- Vincentown fm.*—W. B. Clark, R. M. Bagg, and G. B. Shattuck, 1897, G.S.A., Bull., vol. 8, pp. 316-338, Vincentown, Burlington Co., N.J., lower Eocene.
- Weches fm.*—E. A. Wendlandt and G. M. Knebel in A. C. Ellisor, 1929, A.A.P.G., Bull., vol. 13, p. 1341, Crockett rd., 1 1/2 mi. SW. Weches, Houston Co., Texas, middle Eocene, middle Claiborne gr.
- Wheelock mem.*—H. B. Stenzel, 1938 [1939], Texas Univ. Bur. Econ. Geol., Pub. 3818, pp. 20, 125-134, Wheelock Prairie in Brazos and Robertson Counties, Texas, middle Eocene, Cook Mt. fm., upper Claiborne gr.
- White Bluff fm.*—W. H. Dall, 1898, U.S.G.S., 18th Ann. Rept., pt. 2, p. 343, table opp. p. 334, White Bluff, Arkansas R., Jefferson Co., SE. Ark., upper Eocene, lower Jackson gr.
- Wills Point fm.*—R. A. F. Penrose, Jr., 1890, Texas Geol. Sur., 1st Ann. Rept., pp. XLIII, 17, 19, Wills Point, Van Zandt Co., Texas, Paleocene, upper Midway gr.
- Woodstock greensand ml. mem.*—W. B. Clark, 1895, Johns Hopkins Univ. Circ., vol. 15, No. 121, p. 3, Woodstock, old estate above Mathias Point, Potomac R., King George Co., Va., lower Eocene, Nanjemoy fm.
- Yazoo clay.*—E. N. Lowe, 1915, Miss. Geol. Sur., Bull. 12, p. 79, Yazoo City, Yazoo Co., Miss., upper Eocene, upper Jackson gr.
- Yegua fm.*—E. T. Dumble, 1892, Brown coal and lignite of Texas, pp. 124, 148-154, mouth of Yegua Creek, Brazos R., E. Burleson Co., Texas, [Elm Creek, Yegua R., Lee Co., Texas, Dumble, 1918, Texas Univ. Bull. 1869, pp. 102-106], middle Eocene, uppermost Claiborne gr. Nonmarine.

Paleocene	Lower Eocene	Middle Eocene	Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.
	<i>Acanthocardia hatchetig-beensis</i>	<i>Abra petropolitana</i> <i>Adrana aldrichiana</i>	<i>Abra nitens</i> <i>Abra nitens jacksonica</i> <i>Aequipecten perplanus</i> "var."
	<i>A. tuomeyi</i>	<i>Agnocardia claibornensis</i> * <i>A. sp.</i> <i>Alectryonia johnsoni</i> <i>A. ludoviciana</i> <i>A. vicksburgensis mortoni</i>	<i>Agnocardia claibornensis</i> <i>A. vicksburgensis mortoni</i> * <i>A. v. "vars."</i> <i>Alveinus minutus</i> * <i>Amusium ocalanum</i>
	<i>Amusium cf. squamulum</i> (Paris Basin sp.)	<i>Alveinus minutus</i>	<i>Alveinus minutus</i>
	<i>Anapteris regalis</i>	"Anodontia" <i>augustana</i>	<i>Anomia jugosa</i> <i>A. sp.</i>
	<i>Anomia marylandica</i> *	<i>Anomia ephippioides</i>	<i>Arca spp.</i> <i>Arcoperna filosa</i>
	<i>A. rufa</i>	<i>A. hammetti</i>	<i>A. sp.</i> "Astarte" <i>triangulata</i> (Olig.?)
	<i>Arca spp.</i>	<i>A. lisbonensis</i>	<i>Atrina jacksoniana</i> <i>A. quadrata</i> <i>A. sp.</i> <i>Barbatia aspera</i> *
	"Astarte" <i>marylandica</i>	<i>Arca petropolitana</i>	<i>B. corvannis</i> <i>B. cuculoides</i>
	"A." <i>subpontis</i>	"Astarte" <i>castanella</i> "A." <i>newtonensis</i> "A." <i>planimarginata</i> "A." <i>triangulatoidea</i> <i>Atrina cawcavensis</i> <i>A. gravida</i> <i>A. sp.</i> <i>Barbatia aspera</i>	<i>B. inglisia</i>
	<i>Atrina gardnerae</i>	<i>Atrina rostriformis</i> <i>A. spp.</i>	
	<i>Barbatia cuculoides</i> "var."	<i>B. deusseni</i>	
	<i>B. lignitifera</i>		

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
	B. ludoviciana*	B. ludoviciana		B. ludoviciana
		B. rhomboidella		B. palmerae
		B. r. parsaba		B. cf. rhomboidella "vars."
		B. r. subscopula		
		B. uxorispalmeri		
		B. vaughani		B. seraperta
		B. spp.		
	Basterotia prima	Bathyormus clarkensis*		Bathyormus clarkensis
		B. c. ferrocrolinus		B. c. postclarkensis
		B. c. ludovicianus		B. flexurus
				B. f. productus
				B. protexus sinus
				Biocorbula pearlensis
				Cf. Blagroveia gunteri*
	Bornia prima	Cf. Blagroveia gunteri	Bornia plectopygia	
		Bornia isosceles	B. scintillata	
		B. perdita		
	Brachidontes alabamensis	B. zapataensis		
		Brachidontes texanus		
		B. sp.		
	Brachidontes potomacensis			
	B. stubbsi			
	Cf. B. saffordi			
		Caestocorbula fossata*	Caestocorbula fossata	Caestocorbula wailesiana
			Cf. C. murchisoni	
			Callista aequorca	Callista annexa
			C. aldfichi	C. pearlensis
			C. mortoni	
			C. perovata*	
		Callista perovata		
		C. p. lisbonensis		
		C. p. subvitrea		
		Calorhadia bastropensis	C. p. subvitrea*	Calorhadia albirupina
	Calorhadia acala			

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
<i>Calorhadia elongatoidea</i> "var."	<i>C. aldrichiana</i>	<i>C. bella</i>	<i>Calorhadia bella</i> *	<i>C. mater</i>
	<i>C. a. sabinetownensis</i>	<i>C. compsa</i>		
	<i>C. elongatoidea</i> *	<i>C. equalis</i>	<i>C. equalis</i> *	<i>C. cf. opulenta</i>
	<i>C. e. "var."</i>	<i>C. evanescens</i>	<i>C. opulenta</i> *	<i>C. reginae</i> Jacksonis
	<i>C. pharida</i>	<i>C. hammetti</i>	<i>C. pistoriipes</i>	<i>C. r. "var."</i>
	<i>C. potomacensis</i>	<i>C. houstonia</i>		
<i>Cardium knappi</i> *		<i>C. petropolitana</i>		
	<i>Cardium knappi</i>	<i>C. praecompsa</i>		
	<i>C. nucleolum</i>	<i>C. semen</i>	<i>C. semen</i> *	
		<i>C. semenoides</i>		
		<i>Cardium harrisi</i>		
<i>"C." spp.</i> <i>Caryocorbula coloradoensis</i>		<i>C. spp.</i>		<i>Cardium spp.</i>
		<i>Caryocorbula alabamensis</i>	<i>Caryocorbula alabamensis</i> *	
		<i>citronella</i>	"vars.", ima, tecla	
<i>C. kennedyi</i> <i>C. spp.</i>		<i>C. augustae</i>	<i>C. a. gregorioid</i>	
		<i>C. deusseni</i>		
		<i>C. engonatooides</i>	<i>C. densata</i>	<i>Caryocorbula densata</i> *
		<i>C. sp.</i>		<i>C. willistoni</i>
<i>Chama gainesensis</i>		<i>Chama harrisi</i>		<i>C. w. arkansia</i>
		<i>C. monroensis</i>		<i>Chama richardsi</i>
		<i>C. sp.</i>		<i>C. spp.</i>
		<i>Chlamys beverlyi</i>		
<i>Chlamys johnsoni</i> *	<i>Chlamys choctavensis</i>	<i>C. biddeana</i>		<i>Chlamys biddeana</i> *
	<i>C. greggi</i>	<i>C. burlesonensis</i>		<i>C. cooki</i>
	<i>C. johnsoni</i>	<i>C. cainei</i>		<i>C. corvina</i>
	<i>C. seabensis</i>	<i>C. cawcavensis</i>		<i>C. cushmani</i>
		<i>C. clarkeana</i>		<i>C. danvillensis</i>
		<i>C. kneiskerni</i>		<i>C. deshayesi dennisoni</i>
		<i>C. pulchricosta</i>	<i>Chlamys deshayesi</i> *	<i>C. dysoni</i>
		<i>C. rigbyi</i>	<i>C. sp.</i>	<i>C. incertae</i>

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.N. Claiborne gr.	Gosport sd.	
<i>Corbicula texana</i>		<i>C. wahtubbeana</i>		<i>C. indecisa</i>
		<i>C. w. willcoxi</i>		<i>C. membranosa</i>
				<i>C. nupera</i>
<i>Corbicula subcompressa</i>				<i>C. spillmani</i>
				<i>C. s. "vars."</i>
				<i>C. s. clinchfieldensis</i>
				<i>C. sp.</i>
<i>Corbicula texana</i>	<i>Corbicula ? cornelliana</i>			
			<i>Corbis lirata</i>	
			<i>C. undata</i>	
<i>Corbicula subcompressa</i>	<i>Corbicula concha</i>		<i>Corbula compressa</i>	<i>Corbula aliformis</i>
	<i>C. milium</i>	<i>Corbula extenuata</i>		
	<i>C. subangonata</i>	" <i>C.</i> " <i>nasutoides</i>		
<i>Crassatella aquiana</i>	<i>Crassatella conradi*</i>	<i>Crassatella antestriata</i>	<i>Crassatella alta</i>	
	<i>C. halei</i>	<i>C. conradi*</i>		<i>Crassatella eutavcolens</i>
		<i>C. eutavcolens*</i>		<i>C. inglisia</i>
<i>C. gabbi</i>		<i>C. littoralis*</i>		<i>C. ocardia</i>
	<i>C. ioannes</i>	<i>C. negreetensis</i>		<i>C. porcus</i>
	<i>C. sepulcollis</i>	<i>C. ? obliquata</i>		<i>C. wilcoxi</i>
<i>C. spp.</i>		<i>C. rhomboidea (?)</i>		<i>C. spp.</i>
		<i>C. texalta</i>		
		<i>C. texana</i>		
<i>Crassatella aquiana</i>		<i>C. trapaquara</i>		
		<i>C. spp.</i>		
		<i>Crassinella aldrichi</i>		
<i>Crassostrea sp.</i>		<i>C. minor</i>	<i>Crassinella minor*</i>	<i>Crassinella pygmaea</i>
		<i>C. pteleina</i>		
		<i>Crassostrea amichel</i>	<i>Crassostrea alabamensis</i>	<i>Crassostrea contracta</i>
		<i>C. frionis</i>		<i>C. gigantissima</i>
		<i>C. sp.</i>		<i>C. sp.</i>

Paleocene	Lower Eocene	Middle Eocene	Gosport sd.	Upper Eocene
	L.M.U. Claiborne gr.			
Cucullaea compressirostra C. gigantea* C. kaufmanensis C. macrodonta C. saffordi & "var." C. texana C. vulgaris (Cret.*)	Cucullaea gigantea "var." C. transversa	Crenella margaritacea Cubiotrea divaricata C. linguafelis C. lisbonensis C. perplicata C. petropolitana C. sanctiaugustini C. sellaeformis* C. s. "var." C. smithvillensis	Crenella isocardioides C. ? latifrons C. margaritacea*	Crenella ? tenuis
	Cucullaria ozarkensis		Cubiotrea sellaeformis vermilla	
		Cumingia ? keittensis Cuna ? astartoides	Cf. Cucullaria aldrichi Cultellus conradi	
		Cuspidaria aequivallis C. attenuata C. multiornata	Cuna monroensis C. parva C. p. fimbriata	
Diplodonta marlboronensis D. sp.	Diplodonta hopkinsensis D. sp.	Diplodonta inflata D. petropolitana D. satex	Diplodonta corbiscula D. inflata*	

Paleocene	Lower Eocene	Middle Eocene	Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.
		D. unguina	D. unguina*
Dosiniopsis lenticularis*	Donax acutangula		Diplodonta unguina yaz- oocola
D. l. meeki	Dosiniopsis lenticularis		Divaricella robertsi
Eburneopecten dalli*	Eburneopecten corneoides	Eburneopecten calvatus	Eburneopecten frontalis
	E. dalli	E. hamiltonensis	E. scintillatus
		E. sp.	E. subminutus (Olig.*)
	Eophysema ozarkana*	Eophysema cf. ozarkana	Eophysema ozarkana "var."
	Epilucina sp.	Eosolen lisbonensis	
	Ervilia lignitica*	Cf. E. abruptus	
			Erycina zitteli
	Etea delawarensis (Cret.*)?		? "Euloxa" sp. Exputens ocalensis Fimbria vernoni Flexopecten anaptes
	Gari harrisi	Fimbria olssoni	
	G. ozarkana	Gari eborea	Gari jacksonensis
	G. smithi		G. sp.
Gastrochaena cimitariopsis	Gastrochaena striatula		Gastrochaena mississippi- ensis G.sp.

Paleocene	Lower Eocene	Middle Eocene	Upper Eocene
	L.M.U. Claiborne gr.	Gosport sd.	
<i>G. dalliana</i>			
<i>G. gainesensis</i>			
<i>G. spp.</i>			
<i>Glossus mediavia</i>	<i>Gemma sanctimauroicensis</i>		<i>Gigantostrea trigonalis</i>
<i>Glycymeris idonea</i> subsp. <i>G. spp.</i>	<i>Glossus ? conradi</i> <i>Gigantostrea sylvaeurypis</i> <i>Glycymeris idonea</i> subsp. <i>G. sp.</i>	<i>Glossus ? vetus</i> <i>Glycymeris conradi</i> <i>G. lisbonensis*</i> <i>G. petropolitana</i> <i>G. sabineensis</i> <i>G. trigonella minor</i> <i>G. wautubbeana</i>	<i>Glycymeris filosa</i> <i>Glycymeris idonea "vars."</i> <i>G. cf. lisbonensis</i> <i>G. spp.</i>
<i>Gryphaeostrea vomer*</i>	<i>Gryphaeostrea vomer</i>	<i>Gratelupia hydana</i>	<i>Gryphaeostrea vomer plicatella</i> <i>Hormomya hamatoidea</i>
<i>Isognomon cornelliana</i>			
<i>Jupiteria jonesi</i>		<i>Hindsia faba</i> <i>H. f. donacia</i>	
<i>J. smirna</i>			
<i>Kelliella ? aldrichi</i>		<i>Katherinella smithvillensis</i> <i>K. ? texitina</i> <i>K. trigoniata</i> <i>K. t. bastropensis</i> <i>K. trinitatis</i> <i>K. sp.</i> <i>Kellia interstriata</i>	<i>Katherinella trigoniata</i>
			<i>Kelliella boettgeri</i>

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
K. ? evansi Kummelia americana	Kummelia americana*	Laevicardium palmerae		Laevicardium gardnerae L. levyi Ledina sp. Lima tricincta L. vicksburgiana
	Lepton vaughani Lima ozarkana	Lima bastropensis L. harristana L. petropolitana L. smithvillensis L. sp. Limopsis aviculoides ma- uricensis L. a. "var." Linga hamata		L. sp. Limopsis radiata
Limopsis quihí L. sp.			Linga amica L. carinifera L. pomilia* L. p. alveata L. p. smith*	
Lirodiscus mediavia	Linga pomilia smithi	Lirodiscus protractus L. psychopterus L. santeensis L. smithvillensis*	Lirodiscus tellinoides*	Lirodiscus jacksonensis L. tellinoides scutellarius Cf. L. sp.
	Lirodiscus smithvillensis "var." L. virginianus			
Lithophaga gainesensis Cf. L. marylandica L. sp.	Lucina ? astartiformis L. dartoni "L." sylvaeurupis L. uhleri* L. ulrichi	Lucina sp.	Cf. Lithophaga claibornensis L. ? petricoloides "Lucina" bisculpta L. dolabra L. papyracea	Lucina atoma L. perminuta L. spp.

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
	L. whitei L. sp.	Lutetia texana	Macoma danai M. scandula M. sillimani	
	Macrocallista subimpressa M. sylvaerupis M. triangulata M. ? sp.			
	Mactropsis olssoni		Mactropsis acquorea M. retilinearis	Mactra inornata
Martesia sp.	Martesia elongata M. recurva	Martesia ? laredoensis M. texana Mauricia houstonia M. leonia Meiocardia carolinac* Mercimonia ? mer- cenaroidea Metis ? eutawensis		Margaritaria inexpectens
				Meiocardia carolinac Mesodesma singleyi
			Micromeris minutissima Microstagon nana	Miltha ocalana
Cf. Miodontiscus aldrich- ianus Modiolus subinflatus Cf. M. pontis M. sp.	Cf. Miodontiscus timothii Cf. M. sp. Modiolus johnsoni M. marylandicus M. ovatus M. spp. Montacuta bicuspidata M. herberti	Modiolus cawcawensis M. sp.		Modiolus cretaceus M. sp.
			Montacuta claiborniana	

Paleocene	Lower Eocene	Middle Eocene	Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.
	<i>Mysella minuta</i>		
<i>Nemocardium actium</i>	<i>Nemocardium harrisi</i>		<i>Myrtea</i> ? <i>curta</i>
<i>N. quithi</i>	<i>N. lene</i>		<i>M.</i> ? <i>subcurta</i>
<i>N. n. sp.</i>			<i>Nemocardium nicolletti</i>
<i>N. spp.</i>			
<i>Nucula mediavia</i>	<i>Nucula potomacensis</i>		
<i>N. spp.</i>	<i>N. sp.</i>	<i>Nemocardium curtum</i>	<i>Cf. Mysella dalli</i>
		<i>N. gambrinum</i>	<i>Nanohalus cossmanni</i>
		<i>N. salivale</i>	
		<i>N. spp.</i>	
		<i>Notocorbula texana</i>	
		<i>Nucula circe</i>	" <i>Nucula capsioptis</i> "
		<i>N. magnifica "var."</i>	<i>Nucula magnifica</i> * &
		<i>N. mauricensis</i>	" <i>var.</i> "
		<i>N. monroensis</i>	<i>N. ovula</i>
		<i>N. ripae</i>	
		<i>N. secunda</i>	
		<i>N. smithvillensis</i>	
		<i>N. spp.</i>	
<i>Nuculana "bella var."</i>	<i>Nuculana coelata</i>	<i>Nuculana albaria</i>	<i>Nuculana coelata</i>
<i>N. cliftonensis</i>	<i>N. corpulentoides</i>	<i>N. calcarensis</i>	
<i>N. cultelliformis</i>	<i>N. c. "var."</i>	<i>N. carolinensis</i>	
<i>N. eoa</i>	<i>N. improcera</i>	<i>N. coelatoides</i>	
<i>N. fiski</i>	<i>N. marieana</i>	<i>N. crassiparva</i>	
<i>N. hannahae</i>	<i>N. milamensis</i>	<i>N. jewetti</i>	
<i>N. parilis</i> *	<i>N. parilis "var."</i>	<i>N. kittensis</i>	
<i>N. saffordana</i>	<i>N. tysoni</i>	<i>N. magna lisbonensis</i>	<i>N. magna</i> *
<i>N. sp.</i>	<i>N. sp.</i>	<i>N. magnopsis</i>	<i>N. plana</i>
		<i>N. multilineata</i>	
		<i>N. ozarkola</i>	
		<i>N. subtrigona</i>	
		<i>N. trivitate</i>	
		<i>N. trumani</i>	
		<i>N. vanuxemi</i>	<i>N. multilineata</i> *
		<i>N. wautubbeana</i>	<i>N. sp.</i>

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
Cf. <i>Orthoyoldia kindlei</i>	<i>Odontogryphaea thirsae</i>	<i>Orthoyoldia claibornensis</i> <i>O. psammotaea</i> <i>O. p. orangeburgensis</i> <i>O. p. vivianensis</i> <i>O. spp.</i>		<i>Orthoyoldia rubamnis</i> <i>O. spp.</i>
<i>Oryctomya bryani</i> <i>Ostrea alepidota</i>	Cf. <i>Oryctomya prima</i> <i>Ostrea artosis</i> <i>O. bryani</i> * <i>O. duvali</i> <i>O. intermedoides</i>	<i>Ostrea bryani</i> <i>O. carolinensis</i> <i>O. gierharti</i> "O. ^p glauconoides" <i>O. podagrina</i> <i>O. semmesi</i> <i>O. spp.</i>	<i>Oryctomya claibornensis</i>	<i>Ostrea falco</i> <i>O. frithi</i>
<i>O. ? convexa</i> (Cret.*) <i>O. crenulimarginata</i> <i>O. ? dissimilaris</i> <i>O. kochae</i> <i>O. multilirata sabinensis</i> <i>O. pulaskensis</i> <i>O. tecticosta</i> (Cret.*) <i>O. spp.</i>	<i>O. multilirata</i> * <i>O. sinuosa</i> <i>O. spp.</i>			<i>O. podagrina</i> <i>O. spp.</i>
	<i>Pachecoa decisa</i> "var." <i>P. microcancellata</i>	<i>Pachecoa adamsi</i> <i>P. cainae</i> <i>P. catonis</i> <i>P. decisa abbreviata</i> <i>P. declivis</i> <i>P. ellipsis</i> <i>P. ledoides</i> <i>P. lisbonensis</i> <i>P. ovalis</i> <i>P. pulchra</i> <i>P. p. "vars."</i> <i>P. sabinica</i> <i>P. smithvillensis</i>	<i>Pachecoa decisa</i> * <i>P. d. "var."</i> <i>P. ellipsis</i> * <i>P. ledoides</i> * <i>P. pectuncularis</i> <i>P. perplana</i>	<i>Pachecoa corvannis</i>

Paleocene	Lower Eocene	Middle Eocene	Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.
Panopea elongata	Panopea alabama P. bellsensis P. elliptica	Parapholas kneiskerni	Panopea porrectoides Cf. Parmicorbula gibbosa "Pectunculus" corbuloides
	Pecten sp. Pelecypora hatchetigbeensis Periploma butlerianum P. howei P. spp.	Pecten elixatus	Pecchiolia dalliana
Periploma sp.	Periploma elliptica (Cret.*) P. truncata Petricola ? novaegyptica Phacoides sabelli	Periploma collardi* P. c. australinum	Periploma claibornense* P. complicatum P. sp.
Phacoides albaripus P. mesakta P. spp.		Phacoides sp.	Petricola claibornensis
Phenacomya petrosa Pholadomya marylandica P. mauryi		Pholadomya claibornensis P. harrisi P. leonensis P. petropolitana	
	Pholas alatoidea P. aldrichi P. sp. Physoidea clarkeana Pinna ? harnetti Pitar eversus P. lenis P. nuttalliopsis P. n. fulvus	Pitar amichel P. angulinae P. gazleyensis P. juliae	Pitar cornelli P. ? exiguus P. nuttali P. poulsoni
Cf. Pitar biboraensis Cf. P. hawtofi Cf. P. kempae P. pteleinus			Pitar securiformis P. spp.

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
<i>P. pyga</i> <i>P. ? ripleyanus</i> <i>P. spp.</i>	<i>P. n. greggi</i> <i>P. n. heilprini</i> <i>P. ovatus</i> <i>P. vetus</i>	<i>P. macbeani</i> <i>P. ovalis</i> <i>P. petropolitani</i> <i>P. texacola</i> <i>P. texibrazus</i> <i>P. tornadonis</i> <i>P. spp.</i>		
	<i>Cf. Plagiocardium sp.</i> <i>Plicatula filamentosa</i> "var."	<i>Plicatula filamentosa</i> "var."	<i>Plicatula filamentosa</i> *	
<i>Plicatula sp.</i>		<i>P. f. concentrica</i> <i>P. f. planata</i>		<i>Plicatula ? louisiana</i> <i>P. spp.</i> <i>Poromya mississippiensis</i>
"Protocardia" sp.	<i>Polorthus tibialis</i>	<i>Pseudochama sp.</i> <i>Pseudomiltha megameris</i> <i>Pteria ? annosa</i> <i>P. petropolitana</i> <i>P. sp.</i>	<i>Pteria limula</i> *	<i>Pseudomiltha megameris</i> * "Pteria" cf. <i>argentea</i> <i>P. limula vanwinkleae</i>
<i>Pteria deusseni</i> <i>P. spp.</i>	<i>Pteria sp.</i>	<i>Pteropsella lapidosa</i> <i>P. praclapidosa</i> <i>Rhabdopitaria astartoides</i> <i>R. pricei</i> <i>R. texangelina</i> <i>R. winnensis</i> <i>Saccella ? atakta</i> <i>S. catasarca</i>	<i>Pteropsella papyria</i> <i>Rhabdopitaria discoidalis</i> <i>R. subcrassa</i>	
<i>Saccella quercollis</i> <i>S. sp.</i>	<i>Saccella parva</i> <i>S. robusta</i> <i>Saxicavella alabamensis</i> <i>Cf. Saxolucina greggi</i>	<i>Saxolucina claibornensis</i>		<i>Saxolucina gaufia</i>
<i>Cf. Saxolucina aquiana</i> <i>S. claytonia</i> <i>S. fortidentalis</i>	<i>Scintilla clarteana</i> <i>Semele langdoniana</i>	<i>Semele australina</i>	<i>Scintilla alabamiensis</i>	

[illegible]

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
		<i>T. petropolitana</i> <i>T. raveneli</i> * <i>T. santander</i> <i>T. subequalis</i> <i>T. tallicheti</i> <i>T. trumani australina</i> <i>T. spp.</i>	 <i>T. vaughani</i>	 <i>T. raveneli weisbordi</i> <i>T. spillmani</i> <i>T. s. corvia</i> <i>T. trumani garlandica</i> <i>T. vaughani</i> * <i>T. v. "vars."</i> <i>T. vickburgensis moodiana</i> <i>T. spp.</i> <i>Teredo mississippiensis</i>
<i>Teredo maverickensis</i>		<i>Teredo emacerata</i>	<i>Teredo simplex</i> <i>T. simplexopsis</i>	
<i>T. ringens</i>			<i>Textivenus reticulata</i>	<i>Timothyus bulla</i> <i>T. deflatus</i>
<i>T. virginiana</i> *	<i>T. virginiana</i>	<i>Timothyus anteproductus</i>		
		<i>Trachycardium ouachitense</i>	<i>Trapizium claibornense</i>	
		<i>Trigonocardia avona</i>		<i>Trigonocardia protoalcula</i> *
		<i>T. protoalcula</i>	<i>Trinacria cuneus</i> *	
		<i>Trinacria cuneus</i>		
		" <i>T. decisa carolina</i> " (See <i>Pachecoa</i>)		
		<i>Veleda equilatera</i>		
			<i>Venericardia aldrichi</i> <i>V. alticostata</i>	
<i>Venericardia bulla</i>	<i>Venericardia alticostata</i> "var."	<i>Venericardia angustoscrobis</i>		
<i>V. crenata</i>	<i>V. aposmithii</i>			
<i>V. eoa</i>	<i>V. ascia</i>			
<i>V. francescae</i>	<i>V. bashiplata</i>			
<i>V. gardnerae</i>				
<i>V. hesperia</i>				
<i>V. hijuana</i>			<i>V. claiboplata</i>	

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
<i>V. jewelli</i>		<i>V. claviger</i>		<i>Venericardia apodensata</i>
<i>V. mediaplata</i>		<i>V. complexicosta</i>		<i>V. cookei</i>
<i>V. mingoensis</i>		<i>V. cookei</i>		<i>V. diversidentata*</i>
<i>V. moa</i>		<i>V. densata*</i>	<i>V. diversidentata sym-</i>	<i>V. d. symmetrica</i>
<i>V. m. "n. subsp."</i>	<i>V. densata pendletonensis</i>	<i>V. eutawcolens</i>	<i>metrica</i>	<i>V. d. "var."</i>
<i>V. regia</i>	<i>V. greggiana</i>		<i>V. inflator*</i>	<i>V. inflator jacksonensis</i>
<i>V. smithii</i>	<i>V. gulielmi</i>	<i>V. klimacodes</i>		<i>V. klimacodes*</i>
<i>V. whitei</i>	<i>V. hatcheplata</i>	<i>V. leonensis</i>		<i>V. ocalaedes</i>
<i>V. wilcoxensis</i>	<i>V. horatiana</i>	<i>V. mooreana</i>		
<i>V. spp.</i>	<i>V. intermedia</i>	<i>V. natchitoches</i>		
	<i>V. nanaplata</i>	<i>V. parva</i>	<i>V. parva*</i>	<i>V. parva "var."</i>
	<i>V. n. nanna</i>	<i>V. perantiqua</i>		<i>V. praecisa</i>
	<i>V. pilsbryi</i>	<i>V. rotunda coloradonis</i>	<i>V. rotunda*</i>	<i>V. vicksburgiana</i>
	<i>V. potapacoensis</i>	<i>V. r. flabellum</i>	<i>V. sillimani</i>	<i>V. withlacoochensis</i>
	<i>V. sabinensis</i>	<i>V. r. kingi</i>		<i>V. spp.</i>
	<i>V. turneri</i>	<i>V. r. subsp.</i>		
	<i>V. spp.</i>	<i>V. stewarti</i>		
		<i>V. subquadrata</i>		
		<i>V. subrotunda</i>		
		<i>V. texalana</i>		
		<i>V. tortidens*</i>	<i>V. tortidens</i>	
		<i>V. trapaquara</i>		
		<i>V. virginaria</i>		
		<i>V. spp.</i>		
<i>Veniella</i> sp.	<i>Veniella ? rhomboidea</i>			<i>"Venus" jacksonensis</i>
<i>Verticordia</i> sp.	<i>Verticordia granuloides</i>	<i>Verticordia mississippiensis</i>	<i>Verticordia eocenensis</i>	<i>Verticordia cossmanni</i>
		<i>V. satex</i>		<i>V. sp.</i>
		<i>V. sotoensis</i>		
		<i>V. spp.</i>		
	<i>Vokesula aldrichi</i>	<i>Vokesula smithvillensis*</i>		

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
		<i>V. s. petropolitana</i> <i>Xylophaga</i> ? mississippiensis AMPHINEURA	<i>Chiton eocenensis</i> "C." prostremus	
		GASTROPODA (order PTEROPODA)		
	<i>Limacina choctavensis</i> <i>L. elongatoidea</i>	<i>Clio</i> sp.	<i>Clio elba</i> <i>C. nimba</i>	<i>Bovicornu gracile</i> <i>Clio corpulenta</i> <i>C. hastata</i> (Olig.*) <i>C. simplex</i>
		<i>Spiratella augustana</i> "Tibiella" texana SCAPHOPODA	<i>Tibiella marshi</i>	
		<i>Cadulus abruptus</i> * <i>C. newtonensis</i> <i>C. ouachirensis</i> <i>C. subcoarctatus</i> <i>C. sp.</i>	<i>Cadulus depressus</i> <i>C. turritus</i> <i>C. sp.</i>	<i>Cadulus jacksonensis</i> <i>C. juvenis</i> <i>C. margarita</i> <i>C. sp.</i> "Dentalium bitubatum"
<i>Cadulus aldrichi</i> <i>C. phoenicea</i> <i>C. turgidus</i> <i>C. sp.</i>	<i>Dentalium microstria</i> <i>C. multannulatum</i> <i>D. sylvaeuropis</i> <i>D. sp.</i>	<i>Dentalium incisissimum</i>	<i>Dentalium annulatum</i> <i>D. arciforme</i> <i>D. blandum</i> <i>D. minutistriatum</i> <i>D. thalloides</i> <i>D. t. claibornense</i> *	<i>D. danvillense</i>
<i>Dentalium eugenii</i> <i>D. mediavittense</i> <i>D. sp.</i>		<i>D. minutistriatum</i> * <i>D. thalloides claibornense</i>		<i>D. minutistriatum</i> <i>D. mississippiense</i> <i>D. jacksonense</i> <i>D. vincense</i> <i>D. sp.</i> <i>Fustiaria danai</i> <i>F. subcompressa</i>

Paleocene	Lower Eocene	Middle Eocene		Upper Eocene
		L.M.U. Claiborne gr.	Gosport sd.	
		CEPHALOPODA		
	Aturia sp.	Angulithes eliotti Aturia brazoensis & cf. A. garretti A. latilavia A. triangula A. turneri A. vanuxemi		Aturia alabamensis
	Aturoidea pilsbryi	Belemnosella americana Belosaepia alabamensis B. a. voltzi B. harrisi B. saccaria B. uncinata B. ungula* B. veatchi	Belemnosella floweri	
	Aturoidea paucifex		Belosaepia ungula	
	Cimomia marylandensis			
	Eutreploceras bryani E. sloani Hercoglossa tuomeyi H. sp.	Eutreploceras cookanum E. reesidei Hercoglossa, n. sp.		Eutreploceras berryi E. carolinense
	Hercoglossa gardnerae H. mcglameryae H. orbiculata H. splendens H. ulrichi H. walteri H. sp.			

* type horizon

Except where the same species occurs in different horizons specific names in line horizontally do not indicate stratigraphic relationships

"Nautilus" sp.

	EUROPEAN STAGES	GROUP	TEXAS	LOUISIANA	ARKANSAS	TENNESSEE	MISSISSIPPI	ALABAMA	FLORIDA	GEORGIA	SOUTH CAROLINA	NORTH CAROLINA	VIRGINIA	MARYLAND	NEW JERSEY
U P P E R E	LUDIAN	JACKSON		DANVILLE LANDING											
	BARTONIAN		FAYETTE	YAZOO			YAZOO* Tullos	"Ocala ls."†	BUMPHOSE CRYSTAL RIVER WILLISTON 1s."† INGLIS	"Ocala ls."†	COOPER ML.				
				MOODY'S BRANCH	WHITE BLUFF		MOODY'S BRANCH*			BARNWELL	BARNWELL*	CASTLE HAYNE			
M E O C E N E	AUVERSIAN	CLAIBORNE	YEGUA* C Mount Tabor O Landrum H Hurricane lt. M T.* Wheelock	YEGUA COOK MT. Saline Bayou	≡		YEGUA Archusa ml.	COSPORT SD. UPPER LISBON	AVON PARK	MC BEAN*	SANTIZ MC BEAN				
			STONE CITY	CANE R. [CLAUCONITIC]			≡	MIDDLE LISBON							
			WECHES Viesca Tyus					LOWER LISBON							
	LUTETIAN		QUEEN CITY REKLAW Marquez shale				TALLAHATTA (MERIDIAN)*	TALLAHATTA* (MERIDIAN)							
L O C A L E	CUISIAN	WILCOX [SABINE]	SABINETOWN*	SABINETOWN			HATCHETIGBEE Bashi	HATCHETIGBEE* Bashi*							MANASQUAN
	YPRESIAN		PENDLETON FERRY*	PENDLETON FERRY			TUSCAROMA Bells Landing Greggs Landing	TUSCAROMA* Bells Landing* Greggs Landing*		WILCOX†				NANJEMOY Woodstock greensand ml.	NANJEMOY* VINCENTON
	SPARNACIAN		SEQUIN	MARTHAVILLE			NANAFALIA	NANAFALIA*			BLACK MINGO*				
P A L E O C E N E	THANETIAN	MIDWAY	WILLS POINT Kerens Mexia	HALL SUMMIT		PORTERS CREEK*	NAHEOLA PORTERS CREEK	NAHEOLA* Matthews Landing* Succarnoochee cl.*							
	MONTIAN		KINCAID Tehuacana Pisgah Littig	"Logansport fm."			CLAYTON	CLAYTON*		CLAYTON				AQUILA*	BORNERSTOWN
	? DANIAN														

* State of type locality

† undifferentiated

≡ formations present but not involved

Formations are printed in capitals. Members are printed in capital and lower case letters. The terms included are mainly those used in the text modified to the more modern interpretation. The Claiborne group of Texas follows that of Stenzel, Krause, and Twining, 1957. Such a formalized scheme does not allow the insertion of Crockett, Mount Selman, and Laredo formations, upper Claiborne group in the limited space of the chart. See glossary of the stratigraphic terms involved in the text.

PLATES

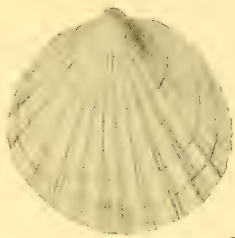
Explanation of Plate 1

All figures are drawings by Otto Meyer for T. H. Aldrich.
Dimensions are indicated by the drawing.

Figure	Page
1, 2. Glycymeris intercostata (Gabb) Holotype, ANSP.	152
3. Flexopecten anatipes (Morton) Holotype, No. 12575 ANSP.	144
4, 5. ? Crenella latifrons Conrad Holotype, missing ANSP.	114
7. " Perna " texana Gabb Holotype, ANSP. Natural size.	261
8, 9. Aequipecten perplanus (Morton) Holotype, ANSP. "St. Stephens limestone, Ala."	25
6, 10. Nemocardium gambrinum (Gabb) Holotype, ANSP. 6. Enlarged sculpture of posterior ribs.	204



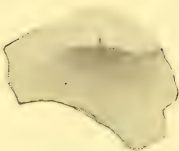
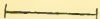
1



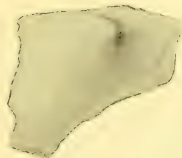
2



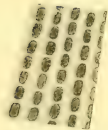
3



5



4



6



7



8

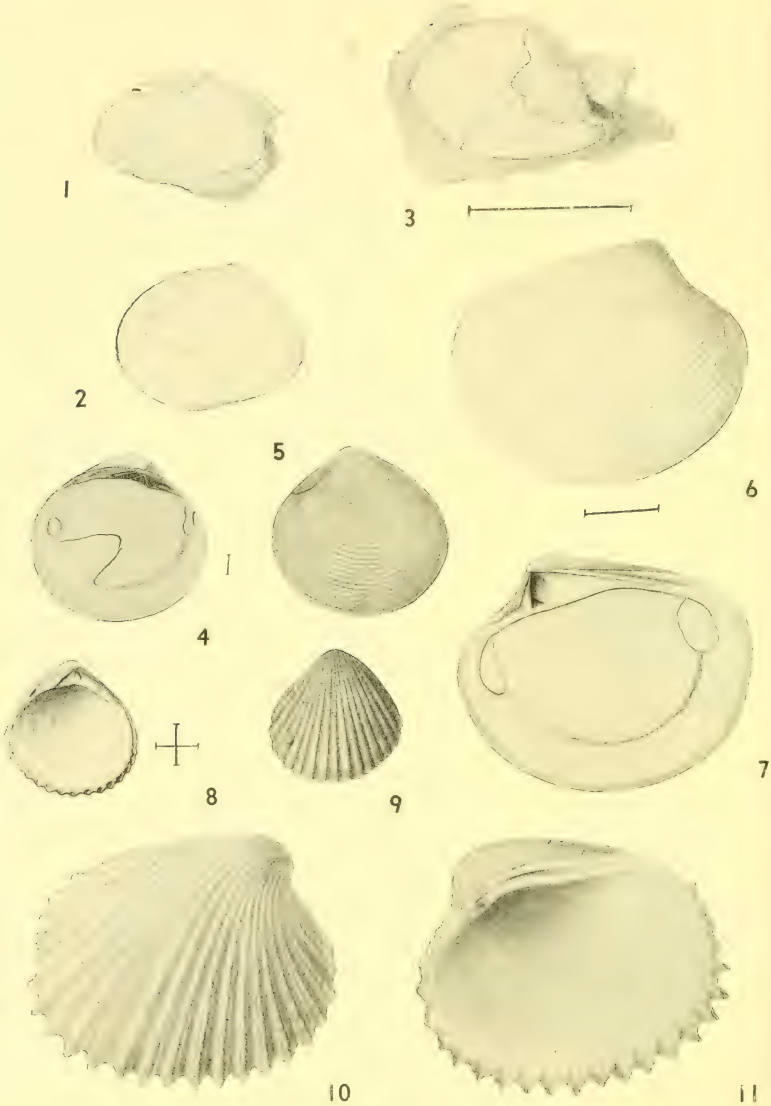


9



10





Explanation of Plate 2

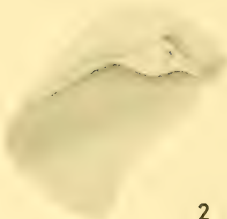
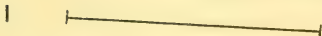
All figures are drawings by Otto Meyer for T. H. Aldrich.
Dimensions are indicated by the drawing.

Figure	Page
1. <i>Tellina albaria</i> Conrad (= <i>T. spillmani</i> Dall) Holotype, No. 13219 ANSP. Natural size.	310
2. <i>Tellina eburneopsis</i> Conrad Holotype, No. 13218 ANSP. Natural size.	304
3. <i>Arcoperna filosa</i> Conrad Holotype, No. 13230 ANSP.	36
4, 5. <i>Katherinella trigoniata</i> (Lea) <i>Cytherea minima</i> Lea Specimen ANSP compared by Otto Meyer with the holotype.	160
6, 7. <i>Crassatella antestriata</i> Gabb Holotype, No. 13259 ANSP.	99
8, 9. <i>Venericardia parva</i> Lea Syntype, No. 5286 ANSP.	336
10, 11. <i>Venericardia alticostata</i> (Conrad) Syntype, No. 30562 ANSP. Natural size.	321

Explanation of Plate 3

Figures 1-6 drawings by Otto Meyer for T. H. Aldrich
Dimensions are indicated by the drawings.

Figure	Page
1. Garum filiosum (Conrad)	146
<i>Psammobia filosa</i> Conrad, holotype Syntype, No. 30526 in part ANSP.	
2. Spisula decisa (Conrad)	297
<i>Mactra decisa</i> Conrad, holotype, No. 30583 ANSP.	
3. Gari (Gobraeus) blainvillii (Lea)	144
<i>Solecurtus Blainvillii</i> Lea, holotype, No. 5021 ANSP. "Specimen broken, had been pasted together with paper and this covers the inside."—O. Meyer.	
4. Garum claibornense Dall	146
Shell on same card as type of <i>Garum filiosum</i> (Conrad), re- named <i>Garum claibornense</i> by Dall, 1900. Holotype, No. 30526 ANSP (same number as <i>G. filiosum</i> Conrad above). Interior of figure 5.	
5. Garum claibornense Dall	146
Holotype, No. 30526 in part ANSP. See explanation figure 4.	
6. Tellina alta Conrad	303
Holotype, No. 30527 ANSP. Natural size.	
7. Cf. Eosolen abruptus (Dall)	140
Paralectotype, No. 644665 USNM. Right valve, 70 mm., length; 18 mm., height.	
8. Cf. Eosolen abruptus (Dall)	140
Lectotype, No. 140118 USNM. Left valve, 60 mm., length; 19 mm., height.	
9, 10. Pachecoa perplana (Conrad)	248
<i>Pectunculus perplanus</i> Conrad, syntypes, No. 30596 ANSP. 9. Left valve, 14 mm., length; 12 mm., height. 10. Right valve, 10 mm., length; 9 mm., height.	



2



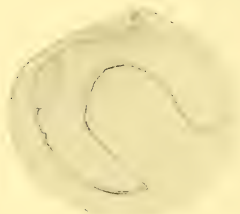
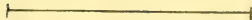
3



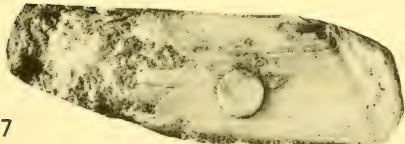
4



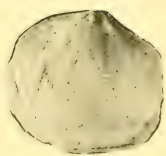
5



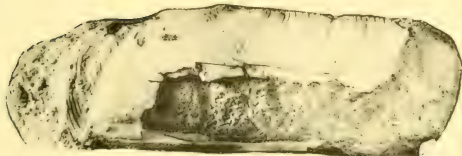
6



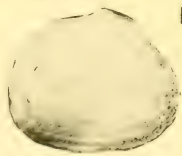
7



9



8



10

XXXVI.	(Nos. 155-160). 412 pp., 53 pls.	16.00
	Globotruncana in Colombia, Eocene fish, Canadian-Chazyan fossils, foraminiferal studies.	
XXXVII.	(Nos. 161-164). 486 pp., 37 pls.	16.00
	Antillean Cretaceous Rudists, Canal Zone Foraminifera, Stromatoporoidea	
XXXVIII.	(Nos. 165-176). 447 pp., 53 pls.	16.00
	Venezuela geology, Oligocene Lepidocyclus, Miocene ostracods, and Mississippian of Kentucky, turritellid from Venezuela, larger forams, new mollusks, geology of Carriacou, Pennsylvanian plants.	
XXXIX.	(Nos. 177-183). 448 pp., 36 pls.	16.00
	Panama Caribbean mollusks, Venezuelan Tertiary formations and forams, Trinidad Cretaceous forams, American-European species, Puerto Rico forams.	
XL.	(No. 184). 996 pp., 1 pl.	16.00
	Type and Figured Specimens P.R.I.	
XLI.	(Nos. 185-192). 381 pp., 35 pls.	16.00
	Australian Carpod Echinoderms, Yap forams, Shell Bluff, Ga. forams. Newcomb mollusks, Wisconsin mollusk faunas, Camerina, Va. forams, Corry Sandstone.	
XLII.	(No. 193). 673 pp., 48 pls.	16.00
	Venezuela Cenozoic gastropods.	
XLIII.	(Nos. 194-198). 427 pp., 39 pls.	16.00
	Ordovician stromatoporoids, Indo-Pacific camerinids, Mississippian forams, Cuban rudists.	
XLIV.	(Nos. 199-203). 365 pp., 68 pls.	16.00
	Puerto Rican, Antarctic, New Zealand forams, Lepidocyclus, Eumalacostraca.	
XLV.	(No. 204). 564 pp., 63 pls.	16.00
	Venezuela Cenozoic pelecypods	
XLVI.	(Nos. 205-211). 419 pp., 70 pls.	16.00
	Large Foraminifera, Texas Cretaceous crustacean, Antarctic Devonian terebratuloid, Osgood and Paleocene Foraminifera, Recent molluscan types.	
XLVII.	(Nos. 212-217). 574 pp., 83 pls.	16.00
	Eocene and Devonian Foraminifera, Venezuelan fossil scaphopods and polychaetes, Alaskan Jurassic ammonites, Neogene mollusks.	
XLVIII.	(No. 218). 464 pp., 3 pls.	16.00
	Catalogue of the Paleocene and Eocene Mollusca of the Southern and Eastern United States. Pt. I. Pt. II. In press.	
XLIX.	(Nos. 219-221). 174 pp., 18 pls.	5.90
	Peneroplid and Australian forams, North American carroids.	

PALAEONTOGRAPHICA AMERICANA

Volume I.	(Nos. 1-5). 519 pp., 75 pls.	
	Monographs of Arcas, Lutetia, rudistids and venerids.	
II.	(Nos. 6-12). 531 pp., 37 pls.	21.00
	Heliophyllum halli, Tertiary turrids, Neocene Spondyli, Paleozoic cephalopods, Tertiary Fasciolaria and Paleozoic and Recent Hexactinellida.	
III.	(Nos. 13-25). 513 pp., 61 pls.	25.00
	Paleozoic cephalopod structure and phylogeny, Paleozoic siphonophores, Busycon, Devonian fish studies, gastropod studies, Carboniferous crinoids, Cretaceous jellyfish, Platystrophia, and Venericardia.	
IV.	(Nos. 26-33). 492 pp., 72 pls.	25.00
	Rudist studies, Busycon, Dalmanellidae, Byssonychia, Devonian lycopods, Ordovician eurypterid, Pliocene mollusks.	
V.	(No. 34). 62 pp., 6 pls.	4.00
	Tertiary Arcas.	

BULLETINS OF AMERICAN PALEONTOLOGY

Vols. I-VI, VIII-XV. See Kraus Reprint Corp.

16 East 46th St., New York 17, N. Y.

VII. (No. 32).	730 pp., 90 pls.	16.00
Claibornian Eocene scaphopods, gastropods, and cephalopods.		
XVI. (Nos. 59-61).	140 pp., 48 pls.	6.00
Venezuela and Trinidad Tertiary Mollusca.		
XVII. (Nos. 62-63).	283 pp., 33 pls.	11.00
Peruvian Tertiary Mollusca.		
XVIII. (Nos. 64-67).	286 pp., 29 pls.	11.00
Mainly Tertiary Mollusca and Cretaceous corals.		
XIX. (No. 68).	272 pp., 24 pls.	10.00
Tertiary Paleontology, Peru.		
XX. (Nos. 69-70C).	266 pp., 26 pls.	10.00
Cretaceous and Tertiary Paleontology of Peru and Cuba.		
XXI. (Nos. 71-72).	321 pp., 12 pls.	11.00
Paleozoic Paleontology and Stratigraphy.		
XXII. (Nos. 73-76).	356 pp., 31 pls.	12.00
Paleozoic Paleontology and Tertiary Foraminifera.		
XXIII. (Nos. 77-79).	251 pp., 35 pls.	10.00
Corals, Cretaceous microfauna and biography of Conrad.		
XXIV. (Nos. 80-87).	334 pp., 27 pls.	10.50
Mainly Paleozoic faunas and Tertiary Mollusca.		
XXV. (Nos. 88-94B).	306 pp., 30 pls.	10.00
Paleozoic fossils of Ontario, Oklahoma and Colombia, Mesozoic echinoids, California Pleistocene and Maryland Miocene mollusks.		
XXVI. (Nos. 95-100).	420 pp., 58 pls.	11.00
Florida Recent marine shells, Texas Cretaceous fossils, Cuban and Peruvian Cretaceous, Peruvian Eocene corals, and geology and paleontology of Ecuador.		
XXVII. (Nos. 101-108).	376 pp., 36 pls.	12.00
Tertiary Mollusca, Paleozoic cephalopods, Devonian fish and Paleozoic geology and fossils of Venezuela.		
XXVIII. (Nos. 109-114).	412 pp., 54 pls.	12.00
Paleozoic cephalopods, Devonian of Idaho, Cretaceous and Eocene mollusks, Cuban and Venezuelan forams.		
XXIX. (Nos. 115-116).	738 pp., 52 pls.	18.00
Bowden forams and Ordovician cephalopods.		
XXX. (No. 117).	563 pp., 65 pls.	16.00
Jackson Eocene mollusks.		
XXXI. (Nos. 118-128).	458 pp., 27 pls.	12.00
Venezuelan and California mollusks, Chemung and Pennsylvanian crinoids, Cypraeidae, Cretaceous, Miocene and Recent corals, Cuban and Floridian forams, and Cuban fossil localities.		
XXXII. (Nos. 129-133).	294 pp., 39 pls.	10.00
Silurian cephalopods, crinoid studies, Tertiary forams, and Mytilarca.		
XXXIII. (Nos. 134-139).	448 pp., 51 pls.	12.00
Devonian annelids, Tertiary mollusks, Ecuadoran stratigraphy and paleontology.		
XXXIV. (Nos. 140-145).	400 pp., 19 pls.	12.00
Trinidad Globigerinidae, Ordovician Enopleura, Tasmanian Ordovician cephalopods and Tennessee Ordovician ostracods, and conularid bibliography.		
XXXV. (Nos. 146-154).	386 pp., 31 pls.	12.00
G. D. Harris memorial, camerinid and Georgia Paleocene Foraminifera, South America Paleozoics, Australian Ordovician cephalopods, California Pleistocene Eulimidae, Volutidae, Cardiidae, and Devonian ostracods from Iowa.		



3 2044 072 271 612

Date Due

~~APR 22 1968~~

~~JUN 3 1969~~

~~FEB 1970~~

~~JUN 1970~~

~~MAY 1973~~

